differently by JICA and other aid agencies. JICA does not pay allowances to counterparts, but other agencies pay monthly allowances in excess of several hundred U.S. dollars. Furthermore, it has become common practice to provide sitting allowances when attending conferences and trainee allowances for training. (omitted) For the 7-year span of cooperation since the Main Phase commenced in 1997, 11 counterparts have left for other organizations in search for higher wages. This kind of loss of human resources not only leads to a decline in the efficiency and effectiveness of the technical cooperation project, but it also becomes a contributing factor to significantly undermine the sustainability of the post-project phase. It is often said that the incentives for JICA's cooperation is 'nothing more than its counterpart training.' I asked myself, 'What do we have to do to maintain the incentives for counterparts?'" It is an ironic situation where Japan's many years of aid is nurturing a reliance, and at the same time, efforts to reduce the reliance on aid from Japan are backfiring.

2-5-4 Analysis

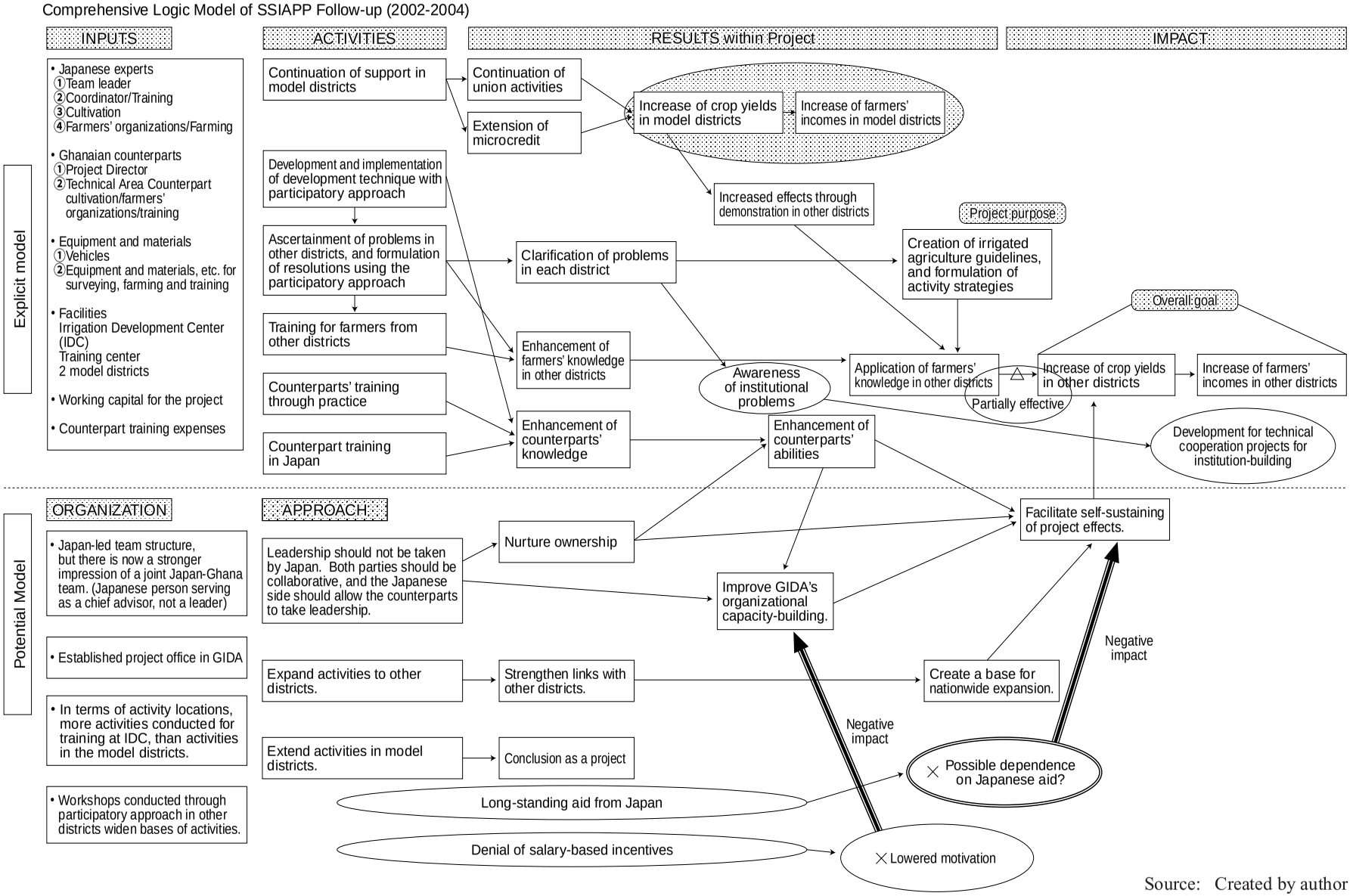
The following facts can be indicated from the relationship between the initial intent and the results in Figure 2-10:

① The effectiveness and problems of developing plans in consideration of the overall goal
② The effectiveness and problems of the projects designed for specific outcomes
③ The effectiveness and problems of the participatory approach
④ The effectiveness and problems of promoting the development of independence

(1) The effectiveness and problems of developing plans in consideration of the overall goal

After reflecting on the previous phase, the project purpose in this new phase was established consistent with the overall goal. In most instances, project purposes are first established and then overall goals are subsequently established with intentional positive effects. However, the philosophy behind this phase was to first make the overall goal ("improvement of irrigation farming systems at the national level") into an ultimate goal that must be absolutely achieved, and then the outcome objectives were established, namely the guidelines and the national level strategy (consolidated action plans of respective districts), as a result of seriously considering what could be done to achieve the goal during the ensuing 2 years of follow-up. By developing plans with priority given to the overall goal, the strategic positioning and scope of the project could be clarified, and it became easier to incorporate the Ministry of Agriculture and other relevant parties at the state level. In addition, and there were further efficacies, such as the provision of a clearly defined direction for making changes to the course of the project, and for the continuation of the project. In actual fact, the theme of "institution-building" for the subsequent phase was also recognized as an issue, as a result of implementing project activities in light of the overall goal. On the other hand, as one of the issues of taking this kind of approach, the scope of projects widens unnecessarily, and poses the risk of getting out of control for some projects when unachievable overall goals are set, or overall goals are unclear. This also probably comes down to how overall goals are set. What is important is how overall goals should be set. To set an overall goal

Figure 2-10 The Logic Model (Follow-up Study)



Source: Created by author

from the perspective of CD, it is necessary to consider how partner countries can build a self-sustaining capacity, and the overall goal cannot be attained just by making tangible targets such as the increase of agricultural yields. It is important to set overall goals by giving consideration to the independently continuous sustainability of a partner country after receiving aid.

(2) The effectiveness and problems of the projects designed for specific deliverables

As another lesson from the previous phase, objectives were set as the specific deliverables of "guidelines" and "national level strategy" during this phase. Although this was an approach not often taken for regular project purposes, people will become clearly aware of the project goals by establishing these kinds of specific objectives. In response to this clear-cut setting of objectives, the persons involved are able to gain a common awareness of a project. In addition, the approach is also effective in administering the project because the project purpose itself becomes a unifying force. If a project purpose is vague, such as "for the project's model property to be demonstrated," the perceptions of the persons involved would become scattered. Eventually, no one would know what the ultimate goal is, and it would become a factor in complicating management. With specific deliverables like these called for, there is also a problem of causing a risk of misunderstanding that only these deliverables need to be achieved for the project, and ignoring the middle process. A copy of "guidelines" or "strategies" is not the ultimate project goal to be achieved, but what is important is the "process" of preparing the documents. Under the process, counterparts strive for CD in a range of aspects through their activities for creating these documents, clarify the needs of farmers, and actualize and raise the potential of the farmers. Japanese experts participated in this phase when plans were to be developed. Thanks to their full appreciation of the "spirit" of the process, they were able to administer the project with respect for the process, and ultimately lead the project to success. However, if this "spirit" cannot be incorporated into the process, there is a risk that specific targeting deliverables will lead to the project becoming a mere facade.

(3) The effectiveness and problems of the participatory approach

During this phase, a participatory approach was consciously adopted. A planning technique with a participatory approach, called WAO, was developed as a tool for first identifying the needs of the farmers and the problems of the irrigation districts in search for solutions. The WAO technique resulted from the counterparts developing its prototype by themselves and improving it independently through training with a participatory approach, called P-Lab. As a result, the ownership of the WAO technique was vested to the counterparts as a "self-developed technique." Counterparts who used this technique in the field were able to implement effective workshops even without the support of the Japanese experts. In fact, because the counterparts developed the technique, they knew the strengths and weaknesses of the WAO technique better than the Japanese experts, and were also able to effectively provide an ad hoc service in the field. Farmers from each irrigation district sorted out their problems in the respective districts using the WAO technique, and devised solutions. Of the solutions,

they implemented activities that could be performed immediately as pilot activities. In most cases, farmer training was meant for farmers themselves to "think" for themselves, not only teaching answers. During this phase, there were positive effects that not even the project team anticipated. There were even some farmers from districts where there was no actual project input, and they achieved increased agricultural production through the WAO technique and training. In this phase, the participatory approach (or bottom-up approach) was adopted as a fundamental approach for all the activities under a project policy, and it is believed that this fact increased the effectiveness. Conversely, as for the issues of the participatory approach, there are such problems as the weakness of taking considerable time because the approach places importance on the awareness of the parties concerned; and quality decreasing according to participating personnel. It is not that all the irrigation districts are actually headed toward improvement. Furthermore, it is not that the participatory approach (or bottom-up approach) will suffice in all instances. Even during this phase, it was recognized that, in addition to the bottom-up approach, the country's institutional support (or top-down approach) was an essential issue for true development.

(4) The effectiveness and problems of promoting the development of independence

In order to nurture and facilitate ownership, or independence, authority was gradually and steadily transferred from Japanese experts to their Ghanaian counterparts. A leader figure among the Japanese experts served as a "chief advisor," not as a leader, and further clarified a Ghanaian leading role with a Ghanaian project manager. The Ghanaian project manager and the Japanese chief advisor actually did not fail to attend the weekly management meeting in order to consult with each other and make decisions, and efforts were made so the Ghanaian side will have ownership. However, as spoken reflectively by the experts, the dependent nature was not improved. One of the reasons is that, as a result of the many years of aid, the reliance on Japanese aid was institutionally ingrained. Another reason was the limit to the transfer of authority. Since almost the entire actual project budget was funded by the Japanese side, the Japanese side had budgetary authority and managed budgets. In this regard, it is unclear how far the Ghanaians were able to develop a sense of "their own project." With regard to "wage-based incentives" which JICA vehemently denied so as to prevent a reliance on aid, the Japanese way conversely brought about a decline in motivation, and the loss of counterparts to other employers without getting their real intention to be understood, so the Japanese way had many problems as a means for nurturing independence.

2-6 Longitudinal Analysis of JICA's Support for Ghana's Irrigated Agriculture

2-6-1 Longitudinal Analysis Point of View

In this chapter, we divided JICA's support for Ghana's irrigated agriculture, which began in 1988, into 4 phases, and we have commented on the respective intent and results, and the effectiveness and problems of each phase. In this next section, we will consider all the 4 phases as 1 cohesive flow, and

highlight the characteristics of JICA's support. Since these 4 phases form a temporally linked "progression," the perspective of this analysis will not simply be a comparison of each phase, but will be a "longitudinal" analysis seen on an axis of time in order to take a look at the links and interaction among phases.

2-6-2 Characteristics of JICA's Support from the View of Longitudinal Analysis

The following are cited as being consistent characteristics of the 4 phases observed so far:

① The coexistence of flexibility and perfectionism: Goals without strategy, and "projectism"
② Progressive approach: Inheritance of past assets
③ Reliance on input human resources: Japanese experts as key players
④ A sense of collaboration: The relationship with counterparts, and the refusal of financial incentives

These characteristics, and their effectiveness and problems are commented on below:

(1) The coexistence of flexibility and perfectionism: Major goal without strategy, and "projectism"

From the Individual Expert Phase in 1988 until the most recent Technical Cooperation Project Follow-up Phase, a range of approaches for support were taken, but the major goal has remained consistent as the "advancement of irrigated agriculture in Ghana." From the opinions of Japanese experts in charge of each phase, there can be no doubt that this major goal was fully understood and was shared. However, mixed views on "strategies" for achieving the major goal were taken in the respective phases, and there was virtually no consistency. Even if we compare the logic models of each phase, the strategies for nationwide expansion in each phase are disparate. In the Individual Expert Phase, the long term objectives were the overall improvement of irrigation technology through research and the establishment of a research institute representative of Africa; and in the Mini Project Phase, they shifted to research and training focused on rice cultivation. In the ensuing technical cooperation project, the effects of demonstrating and expanding the "model districts" became the strategies; and, as expected, in the final phase, the goal was for nationwide expansion using strategies and guidelines. It was not that the plans themselves were lax. Each project was formed by the experts and other persons involved at the time with full consideration of the existing circumstances. The activity levels of the projects were proceeded with ample planning. Partly because of that, the level of the completed project in each phase was mostly satisfactory as originally intended. On the other hand, it appears that there was not all that much sensitivity shown toward the degree of realization of the nationwide expansion strategy subsequent to the projects. In each project, the prescribed responsibility was at the "project purpose" level (as described in the PDM), and it appears there was not much consideration given to the degree of achieving the overall goal. Even looking at things through each phase, the direction of the major goal of advancing irrigated agriculture in Ghana has been handed down consistently from phase

to phase. But the approach to the strategies for achieving the goal was flexibly changeable for each project. Meanwhile, the approach determined in each phase was implemented firmly with the utmost effort, and made a success of each project. By citing the "goal without strategy," the coexistence of "flexibility" and "perfectionism" can be given as one characteristic, that is, the pursuit of perfectionism within the project using "projectism," with the approach flexibly changing.

(2) Progressive approach: Inheritance of past assets

JICA's efforts to promote Ghana's irrigated agriculture commenced with the 1988 project in which an individually dispatched expert was to establish a research center (IDC) within GIDA. During the ensuing Mini Project Phase, the IDC became the subject of support, and subsequent to this, support basically continued for the IDC and its parent organization, GIDA. Even though the approaches were changing in each phase, they were implemented at GIDA under a structure where facilities, human resources and other assets were taken over from the previous phase. With the varied post-project strategies for each phase as mentioned previously, it might have been alright to start providing support for a totally different organization independently of the past circumstances in some situations. However, we have never heard of such stories. In principle, it has become like a prerequisite that existing facilities as well as human resources and experiences remaining from the earlier phase are respected and carried over as much as possible. Furthermore, in order to carry over the past assets and carry on the support, inputs to a counterpart organization were expanded with each new phase. Inputs were provided only for the IDC in the beginning, but extended to its parental organization, GIDA, in the subsequent Main Phase of the technical cooperation project. (Furthermore, in the continuing proposition which is currently being implemented, there is a tendency for the target of support to expand to also incorporate the Ministry of Agriculture.) Looking at the input portion of the logic models in each phase, we can see that facilities and other inputs are being inherited intact. Respecting and inheriting past assets (facilities, human resources, experiences, etc.) like this have something in common with ancient Japanese thinking, and it may not be a characteristic unique to JICA's support for Ghana's irrigated agriculture.

(3) Reliance on input human resources: Japanese experts as key players

The Japanese experts actually made decisions on the directions of projects in each phase. As mentioned earlier, the major goal of "advancing Ghana's irrigated agriculture" was established at JICA headquarters, and strategies for achieving the goal and project positioning were decided by the Japanese experts in charge of the projects. This tendency was particularly strong during the initial Phase of Individual Expert Phase, and it was still somewhat present during the subsequent phases as well. To be sure, it was necessary to go through approval and other procedures with JICA headquarters and other involved organizations. But now, the concept of the participatory approach has been adopted, so decisions are no longer made at the discretion of the experts. Nevertheless, it has been the Japanese experts who have actually been directing the projects. In fact, it has never been heard of a clear vision

being presented, or strong leadership on post-project strategies being exercised by JICA headquarters or any other related organizations in any of the phases. If JICA headquarters or other related organizations had exercised some decisive instruction on strategy, it is unlikely that the post-project thinking would have been all that rattled in any of the phases. The difference is the disparity in the thinking of the Japanese experts who have, in effect, been deciding the direction of the projects, and the projects have been significantly influenced by the difference. Normally, a project is drawn up first, and personnel are assigned to the project so as to proceed with the project. However, as far as we can see the actual progression of each phase, the plans were not complete, and it was the experts who made decisions and implemented the realistic activities. The success or otherwise of the projects depended on the quality of the experts. When a project succeed or fail under normal circumstances, planners for the project will not be praised for the success of the project, or blamed for the failure of the project, but experts who have implemented the project will assume the responsibility of the project. Essentially, this way of thinking should be logically dismissed. However, since the Japanese actually consider "people as important factors," planners will end up being complimented or criticized. This fact also holds true for JICA's advancement of Ghana's irrigated agriculture, so it appears that its success has largely depended on the experts, who implemented the projects.

(4) A sense of collaboration: The relationship with counterparts, and the refusal of financial incentives

Underlying in each of the phases is Japanese experts' awareness of collaboration. The experts strongly felt that they should collaborate to precede the projects "together with the counterparts" without considering the counterparts as recipients of one-sided aid. In the initial Phase of Individual Expert Phase, the Japanese expert exercised leadership and established a center for development. But from the subsequent phases, the authority was gradually transferred to the counterparts. For example, during the Mini Project Phase, the position of Director General at the center was transferred to the counterpart, and during the technical cooperation project, the counterparts were admitted to the committees. In addition, during the Follow-up Phase, the leader of the Japanese experts clearly positioned himself as a "chief advisor," and clarified his position as a supporter. In this way, the authority was consciously handed over, and persistent efforts were exerted to secure an equal positioning for the counterparts. Furthermore, even during the Individual Expert Phase, while the Japanese leadership was dominant, we can see that there was also the experts' desire to work up a sweat together with the counterparts. For example, the Japanese expert would clean the yard together with all the counterparts, and he would work in the same meager offices as the counterparts do. If it was a case of just achieving the project purpose, the Japanese expert could have instead worked comfortably in a hotel, or if it was a case of only teaching technology, an approach focused on a classroom-style study in fully-equipped hotels could also have been conceivable. However, what was consistently felt through the phases was the Japanese experts' belief that the counterparts should learn through collaboration with the Japanese exerts working up a sweat together in the field though this is something

inconceivable for the ordinary Japanese mindset. This may be partly influenced by JICA's emphasis on technology transferred from person to person through projects for its ideal technological cooperation regardless of the success of projects. The results of questionnaires to the counterparts also showed that the practical approach in the field is characteristic of the Japanese. A sense of collaboration of "working together" is also a mentality typical of the Japanese. Viewed with this mindset, the notion of providing financial incentives is completely incompatible with the ideology of collaboration. Motivating people with financial incentives is a kind of conception for employers who use their employees, and it is not necessary for a collaborative relationship where everybody works hard together. Conversely, even more than financial incentives, focus is placed on training in Japan with the idea of improving technology more effectively, and with the desire for counterparts to understand the Japanese people better. The counterparts are viewed as collaborative partners, rather than mere beneficiaries or project operators, and this fact can be naturally considered to be a major reason behind this enduring relationship-building with the counterparts. Compared to other donors (especially U.S. and European-based donors) that "employ" counterparts using large salaries and build business-like relationships, the relationships between the Japanese and the counterparts in Japanese projects are extremely close (they also include more emotional ties). We believe that underlying this difference is the Japanese sense of collaboration of "working together."

Meanwhile, there were changes with the passing of each phase. If we compare the experts' facilities, the central organization and the attitude of management for each phase, we can uncover trends of transformation.

Table 2-2 is a simple model that demonstrates the trend. While it does not necessarily mean that each phase was this simple characterization, the model does demonstrate the tendencies of Chapter 2 as a progression. What we would like to point out here is the fact that the approach was changing within each phase even only when we take a look at this one example of Ghana's irrigation development as a

Table 2-2 Change of the Approaches Taken in Each Phase

Phase	Profile of the experts	Central organization	Involvement with farmers	Management	Strategies for the overall goal
Individual Expert Phase	Leader	IDC	Indirect	Led by Japan	Abstract
	↓	↓	↓	↓	↓
Mini Project Phase	↓	↓	↓	↓	↓
	↓	↓	↓	↓	↓
SSIAPP Main Phase	↓	↓	↓	↓	↓
	↓	↓	↓	↓	↓
SSIAPP Follow-up Phase	↓	↓	↓	↓	↓
	Supporter	GIDA	Direct	Led by Ghana	Concrete

Source: Created by author

simple progression. Therefore, we cannot categorically bundle the approaches up into one, and say, "This is Japanese-style international cooperation." As long as the experts are human, their attitudes toward the approaches might also have changed day by day even within each phase, if we go to extremes. As for the experts' attitudes, for instance, it is simple to theoretically say that the experts should be supporters rather than leaders, however, this too cannot be a categorical conclusion. As long as technical cooperation ultimately requires human relationships, it is influenced by relationships with counterparts and the social environment. Therefore, it is necessary to fully examine how the Japanese approach was viewed in aid-recipient countries.

2-6-3 Modeling JICA's Support

If we take an overview of JICA's long-term technical cooperation in Ghana historically, it could not be said that it has been carefully mapped out from the outset. Without any strategy for the overall goal to begin with, it could probably be said that experts have been determining specific steps with conditions existent taken into account, and past assets incorporated. In a word, this style of JICA's assistance in Ghana is an "omikoshi style." [An "omikoshi" is a portable shrine that is sometimes hoisted onto people's shoulders and carried in a haphazard manner at Japanese festivals.] This approach is a "progressive approach" where the assets of the past are securely inherited without cohesive strategy aimed at the major goal, and with the projects changing flexibly, and it is "people" who decide on the individual directions of the approaches to take. Figure 2-11 presents this as a diagram.

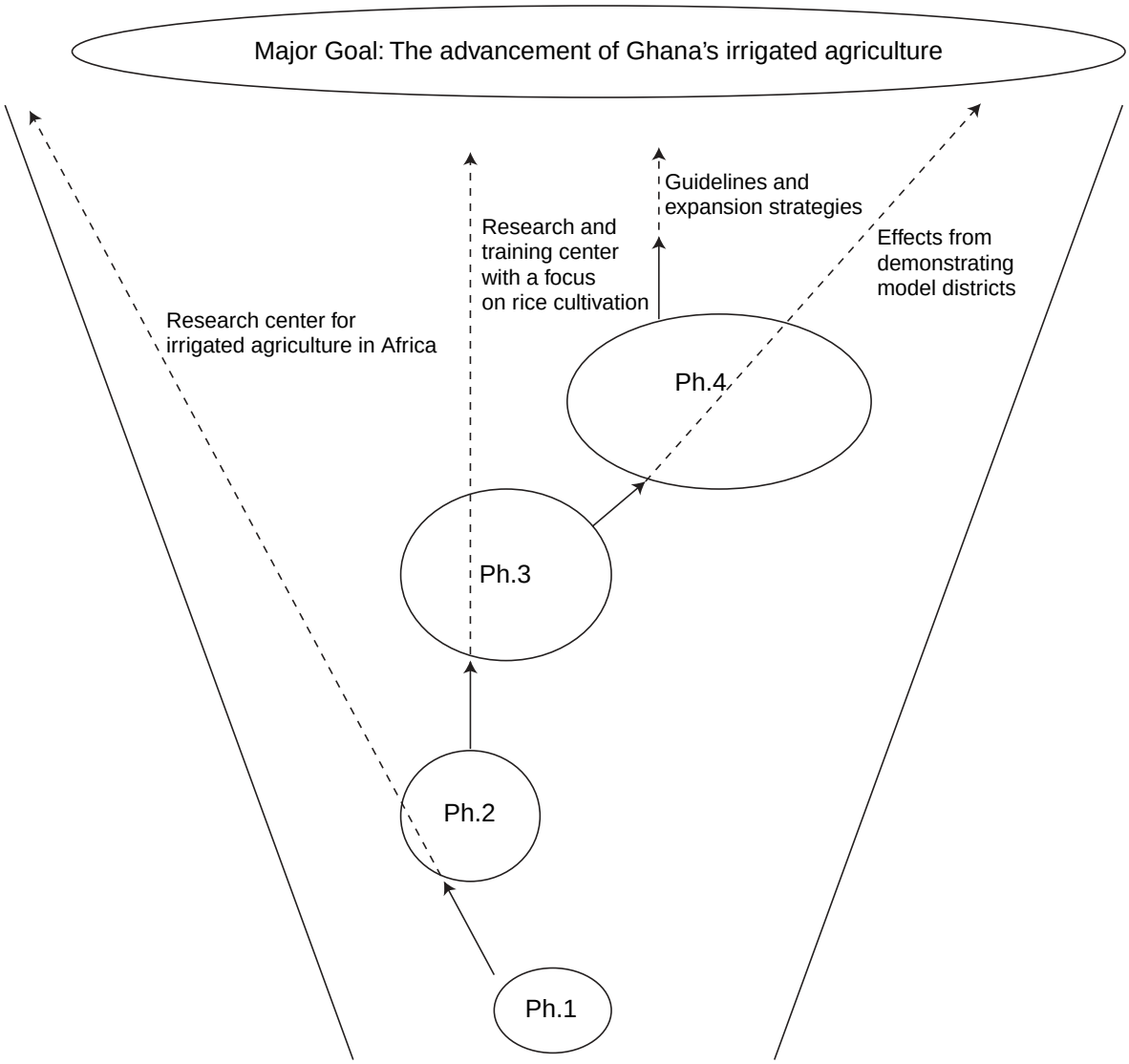
As shown in Figure 2-11, with clear understanding about the major goal being "Ghana's advancement of irrigated agriculture," each phase (Ph.) independently steered its course, and defines the nature of the projects for the duration of that phase. However, when the phase and key persons in charge were replaced by a new phase and new key persons in charge respectively, facilities and human resources built up by their predecessors were continuously used without any change, but the strategies for achieving the major goal, and the directions of the projects were revamped again. Just like "carrying an omikoshi," each phase changed its course, but the overall direction remained consistent. During this process, the commitment to the inherited facilities and organizations ends up getting rapidly bigger and bigger. (In Figure 2-11, the circles represent the inherited assets, and are shown as getting larger each time the phase changes.) Furthermore, what is similar to the omikoshi is the fact that "collaboration" with counterparts is the fundamental philosophy, and under this philosophy, Japanese experts and counterparts are positioned in a cooperative relationship, rather than a more vertical superior-subordinate relationship.

It is probably easier to understand by comparing the characteristic of an omikoshi and "a march." The differences between an omikoshi and a march are that a march has a clearly defined goal, the process is defined according to a plan, and its virtue is its perfect precision; whereas, with an omikoshi,

the goal is to carry it to a certain place, and there is not always a plan on how to carry it or on its directional movement. An omikoshi is carried forward with so-called rhythmical breathing. If we compare Japan's aid to an omikoshi, the style of support provided by the U.S. and Europe, with its distinct goals and strategies, could probably be compared to a march ideologically. (However, within the U.S. and Europe, there are also wide variations, so further examination is required in order to say as such.)

Longitudinal analysis conducted on JICA's support for the advancement of irrigated agriculture in Ghana suggested that support has been promoted "flexibly" and "progressively" toward the major goal with "people" as its fundamental drive through collaborative relationships with the counterparts in the

Figure 2-11 An Image of the Progressive Approach



Source: Created by author

partner country. Meanwhile, a slow, progressive approach has caused some deviation, and it is quite conceivable that there will be a fair amount of waste generated in the long run. For JICA's technical cooperation in Ghana, its activities centered on research at the onset of technical cooperation in 1988, and subsequent to this, the strategic goals have transformed from practical technological improvement, to guidelines-building, and the current objective of institution building. During this process, not all the inputs have been utilized over the long term because there have been some unused equipment and materials. Questions arise whether the support could have been provided more effectively and efficiently if there were a strategic roadmap to the overall goal laid out from the beginning, and whether it is alright to continue to provide support by this kind of omikoshi-style approach. Chapter 3 will deal with field studies on the effectiveness and problems raised by this kind of approach, and based on the results of these studies, we will conduct analysis and explore new directions for improvement in Chapter 4.

Chapter 3
JICA's Technical Cooperation as Perceived by Ghana

Aim of this chapter: This chapter will analyze the results of JICA's previous initiatives in Ghana. The analysis will focus on the views and opinions of the counterparts and farmers from the partner country, rather than from the Japanese perspective. By looking at individual themes related to technical cooperation, this chapter will also touch on the pros and cons of financial incentives for counterparts, and the trend of opinions about other donors' technical cooperation.

3-1 Issues and Objectives of Field Studies

3-1-1 Issues of Field Studies

In Chapter 2, we presented an overview of JICA's 16-year-long efforts. In piecing together an overall picture, these were mostly focused on the opinions of the Japanese experts. In the previously mentioned "Supplementary Theory: Capacity Development (CD)," the main point of JICA's report on criticisms of technical cooperation is the fact that JICA's technical cooperation implements practical cooperation, such as collaborative work between experts and counterparts, or project-type OJT, with the principle objective being to fully appreciate the needs of the partner country and then actually develop human resources rather than merely transplant technology, and that the cooperation also aims for benefits at a societal level by making public institutions the counterpart organizations. The question is though, is this view actually objectively correct?

Technical cooperation is a type of cooperation that only comes into being when there is first a partner. Consequently, in order to analyze the effectiveness of technical cooperation, it is essential that analysis also be conducted from the perspective of the counterparts in the partner country, rather than just from the perspective of the Japanese experts. Furthermore, with regard to the social impact that technical cooperation has, another necessary frame of reference is the changes as seen by the farmers in the model districts, which were to become the centers for activities. Furthermore, in order to conduct an inclusive analysis, another necessary point of view is how technical cooperation is perceived by other organizations who are similarly involved in expanding support in Ghana, such as the Department for International Development (DFID), the World Bank, and other donors, and international NGOs.

We conducted a field study because of the necessity to comprehensively appreciate technical cooperation from a more multifocal point of view. In this chapter, as a prelude to subsequent analysis in Chapter 4, we will analyze the results from our investigation into technical assistance as seen by counterparts, farmers and other donors.

3-1-2 Field Study Objectives

The goals of the field study are as follows:

① to reexamine the currently hypothetical characteristics of each phase, and to gain an accurate understanding of the views of the counterparts, through interviews and workshops with the persons involved from GIDA, which is the counterpart for JICA's support;
② to confirm the impact in the Ashaiman irrigation district (a suburb of Accra), where JICA's technical cooperation project was conducted, as to what kind of changes agricultural production and farmers' lifestyles underwent, and what their involvement with the project was; and
③ to interview relevant people from the other donors, and confirm their thoughts on technical cooperation, and their views on the function of experts and counterparts.

According to up-to-date analysis, the "refusal of financial incentives" was pointed out as a problem or issue for Japan's support activities. Now we must fully examine whether we should simply provide financial incentives, and how this would really impact the motivation for counterparts. We also

Table 3-1 Field Study Schedule

Month	Date	Day	Schedule	Lodging
1	18	Tue	20:55 Arrive Accra (BA 081)	Accra
1	19	Wed	9:00 Visit JICA's Ghana Office 10:30 Courtesy call to Chief Executive of GIDA 11:30 Individual interviews with GIDA counterparts	Accra
1	20	Thu	Public holiday in Ghana: Organize and analyze materials at hotel	Accra
1	21	Fri	10:00-12:00/13:00-15:00 Individual interviews with IDC counterparts	Accra
1	22	Sat	9:00-13:00 Visit Ashaiman Irrigation District (workshop with farmer representatives)	Accra
1	23	Sun	Organize materials	Accra
1	24	Mon	10:00-15:00 Workshop with GIDA counterparts (Venue at Training Center: 14 participants)	Accra
1	25	Tue	9:00-10:00 Visit FAO 11:00-12:00 Visit the World Bank 13:00-14:00 Visit DFID 15:00-16:00 Visit the Ministry of Agriculture	Accra
1	26	Wed	10:00-10:30 Visit IWMI (International Water Management Institute) 13:00-14:00 Visit EU 16:00-17:00 Visit Care International	Accra
1	27	Thu	Organize materials	Accra
1	28	Fri	10:00 Report to JICA's Ghana Office 10:30-11:00 Visit CIDA 13:00-14:30 Visit GTZ 23:30 Depart Accra	Accra

Source: Created by author

investigated the opinions of the counterparts, and the current standing of other donors' projects from these perspectives, and strived to make more pragmatic recommendations from this research. The field study was conducted between January 18 and January 28, 2005. (Refer to Table 3-1.)

3-2 The Reality of Technical Cooperation as Seen from the Field in Ghana

3-2-1 The Reality as Seen by the Counterparts

We conducted interviews with 9 counterparts who had worked alongside Japanese experts over an extended period at GIDA. Following is a presentation and analysis of the outcome. While the opinions of the counterparts are from subjective viewpoints, the question of how the counterparts, who were the main targets for the CD of technical cooperation, perceived Japan's technical cooperation is crucial in uncovering the effectiveness and issues for technical cooperation.

(1) Evaluation of Japanese experts, and requisite capacity

What kind of impression did the counterparts have of the Japanese experts? In regular evaluation studies, individual evaluations are essentially a taboo topic because there is a risk of causing personal attacks. However, individual evaluations are an unavoidable issue of this study in order to confirm individual approaches taken by the Japanese experts, and to examine relationships with the counterparts, we asked the interviewees to speak freely with their names being kept anonymous. The details of the results are presented in Table 3-2. Readers should note, however, that the experts have been divided randomly, so Expert A does not necessarily mean the earliest expert.

Just from looking at the results, the wording used in the opinions of the individual counterparts is varied, however, it seems that their opinions of the individual Japanese experts show a virtually uniform direction. At the same time, however, there are instances where the same expert was evaluated totally differently. For example, the opinion on Expert A held by Counterpart 6 was that "He was serious, yet easy to approach. He would often listen to the opinions of the counterparts..." However, Counterpart 4 and other fellow counterparts had a totally different impression of the same expert, "He did not have much contact with us counterparts... He performed activities just with other Japanese." Counterpart 7's opinions probably hold the key to unraveling this inconsistency, namely, "Expert A's only relationship with counterparts was with the senior officials (at GIDA)."

In other words, the degree of proximity between an expert and counterparts produced a sense of affinity toward the expert, and also influenced their evaluations. The evaluations of the expert varied greatly depending on his relationships with other counterparts, and also which counterpart the expert often communicated with.

The relationship between an expert and counterparts not only changes the evaluation of the

Table 3-2 Evaluation of Japanese Experts by Counterparts

	Expert A	Expert B	Expert C	Expert D	Expert E	Expert F
C/P 1	The J/E had mutual misunderstandings with the Ghanaian PM at the time, and he had little contact with the C/Ps. Communications with C/Ps were insufficient.	N/A	The J/E was similar to his predecessor, but at the same time, he seemed to have the perception that the J/E was ranked higher than the C/P.	I think the J/E was great. He took the same or better cooperative approach than his predecessor.	The J/E had good relationships with the C/Ps, and he incorporated the opinions of the C/Ps from the planning stage.	I think this J/E was great. He also gave me support personally. We did planning together.
C/P 2	The J/E was difficult. We were often at loggerheads. He refused our needs. There was conflict amongst the experts as well.	My impression of the J/E was that he was reluctant to communicate and would always be at a desk.	I think he had good person-to-person relationships. He tried to understand the Ghanaian culture, and he joined in with the Ghanaians.	I did not have a direct working relationship with him, so I cannot evaluate him. However we had a good relationship.	He only listened to the opinions of certain Ghanaians, and he did not appear to have an interest in irrigation.	When we went out on trips together, we spoke of many things. We were able to understand each other and were happy. He was also firm when debating something.
C/P 3	N/A	N/A	N/A	The J/E always listened to the feelings of the C/P. He emphasized the direct impact on farmers, such as formulating and implementing an action plan.	N/A	The J/E exercised firm leadership. He was not easy-going. He placed great importance on training.
C/P 4	There were many problems, and it was as if it took all his might just to get the project up and running. He appeared to be flexible, but there were times that he was not - he was unstable. He performed activities just with other Japanese.	The J/E was flexible, however, he lost staff because he restricted the incentive training to only a select group of people.	The J/E was flexible and easy to talk to. He was broadminded, and he included all the GIDA staff in selecting the participant for the incentive training in Japan.	The J/E was flexible. He listened to what people had to say.	The J/E was a hard worker, and he worked only with C/Ps who also worked hard. Many C/Ps could not keep up with him. He was not flexible. He exploited the training in Japan as an incentive.	He was a hard worker, but he was also flexible. This type of expert is good if others are similarly hard workers, but there were some staff who could not keep up with him.
C/P 5	N/A (I was working at another irrigation district.)	N/A (I was participating in the training in Japan.)	Similar to his predecessor, the J/E encouraged group work, and he made the meetings regular. He did not do things to "push" us.	What was different from his predecessor was that if he said "No" then he meant "No." It was from this time that the relationships with the other irrigation districts became stronger. This J/E was also easy to approach.	A very straight personality. He "pushed" the C/Ps to work. He was a pioneer. He encouraged all the C/Ps to work, such as cleaning. However, he did not have much to do with the farmers.	This J/E was extremely easy to talk to, and had a good approach. He also made a closer relationship with the farmers. He was hard on the outside, but flexible on the inside. (Even when he said he would not provide a daily allowance, in the end he did.)
C/P 6	The J/E was serious, yet easy to approach. He would often come to the sites, and would often listen to the opinions of the counterparts.	N/A	N/A	The J/E was similar to their predecessor, but he was closer to the C/Ps. He was sensitive to the opinions of the C/P. He explained JICA's policies well for us.	N/A	He incorporated all the relevant persons into the committee, and the relationships became closer. He was young and active. He was hard working and emphasized outcomes. He also had good relationships with other experts. He emphasized the sharing of information and training.
C/P 7	The J/E was older. Relationships with C/P were limited to senior C/P. He was difficult to approach. He performed well.	The J/E was cool. Basically, he did the same as his predecessor.	The J/E was a hard worker and very sociable. A group conscious was formed from the regular Monday meetings and from the Friday afternoon cleaning for all the staff. His management was good, but he was not technical.	The J/E was sociable, and also communicated well with the C/Ps. Similar to Mr. C, this Mr. D knew what "assistance" was about.	He was sociable and a hard worker. He worked himself. He also did the painting himself. Conversely, he did not understand the existing conditions in Ghana.	The J/E was "social" and gave an impression of being unconstrained. He was easy to approach. He always encouraged us C/Ps. He also gave us a daily allowance even when we made a single-day field trip.
C/P 8	N/A	N/A	N/A	Although he was an expert in irrigation, he had a very broad outlook. He was also good at management.	N/A	The J/E was an expert in agriculture. He had good relationships with the people involved. He was friendly and frank.
C/P 9	The J/E was neither flexible nor sociable. We had little interaction. He was strict. He was not very good at English. The committee meetings (where he would meet with C/P) were irregular, and the relationship with C/Ps was not good.	N/A	N/A	He was sociable. He tried to close the gap between J/Es and C/Ps. He tried to promote decentralization. He was strong in management.	N/A	The J/E interacted a lot. He was good at English. He was strict on work outcomes. He had good organizational skills, and he was frank. He held regular committee meetings, and exercised strong leadership.

Note: C/P: Counterpart; J/E: Japanese Expert; PM: Project Manager
Source: Created by author

expert, but also affects the motivation of the counterparts. For example, Counterpart 2 and some other counterparts, who left the project because they were not able to successfully build relationships with the Japanese experts, were critical of Japan's technical cooperation throughout the interview. Of course, there might have been their own problems or misguided remarks, but the fact still remains that the failure to build relationships had consequential negative effects. Conversely, it is evident that there was a tendency that experts who valued communications were generally evaluated highly, and technical cooperation made at that time was also highly evaluated. This hypothesis - that the communication skills of an expert, and his relationship with his counterparts greatly affected their evaluations of the expert - can also be ascertained from the results of a workshop with the counterparts. At the workshop, participants gave the characteristics of a "good expert" and a "poor expert," as well as a "good counterpart" and a "poor counterpart" in order of importance. This is presented in Table 3-3.

What should be noted here is that for experts and counterparts alike there is only 1 technical factor, and that most of the remainder are to do with each individual's attitude toward collaboration in addressing the project, or his or her communication skills. Of course, having knowledge in a relevant field is a major premise for experts, but besides that, what is needed for experts are communication skills, a collaborative attitude through dialogue with counterparts, and serving as a supporter. For counterparts as well, it is their attitude that is sought after, rather than their knowledge or experience. The importance of these non-technical skills has already been raised, but this was treated more like a lubricant or training wheels for the smooth transfer of technology. As far as can be told from looking at

Table 3-3 Characteristics of Good/Poor Experts and Good/Poor Counterparts

What makes a good expert? (^o^)/	**What makes a good counterpart? (^o^)/**
(1) Tries to make a project successful	(1) Is inclined to learn for oneself and communicate to others
(2) Has knowledge of the relevant field	(2) Is a hard worker
(3) Performs work in a collaborative manner while always maintaining dialogue with counterparts	(3) Emphasizes outcomes
(4) Has good personal communication skills	(4) Is a team worker
(5) Provides advice	(5) Has good concentration level
(6) Can communicate	(6) Is innovative
(7) Provides support for counterparts	(7) Has good personal communication skills
(8) Also participates in local activities	(8) Has technical skills
(9) Understands the cultural differences	(9) Is punctual
	(10) Is regular
What makes a poor expert? (-_-);	**What makes a poor counterpart? (-_-);**
(1) Lacks knowledge of field	(1) Has no sense of learning by oneself
(2) Puts more emphasis on Japanese taxpayers	(2) Is unenthusiastic or lazy
(3) Works independently	(3) Produces no (or little) results
(4) Is autocratic	(4) Cannot communicate person-to-person
(5) Pursues own benefit or interest	(5) Continually criticizes
(6) Shows no interest in circumstances of counterpart	
(7) Is unenthusiastic toward work (lazy)	
(8) Laughs at the poor circumstances of the counterpart	

Source: Created by author

these results, we get the feeling that, for counterparts, these non-technical skills are not so much a facilitative lubricant or set of training wheels, but are more like the gasoline, or one of a pair of wheels, which are crucial for technology transfer.

Another important viewpoint lies in how closely the Japanese experts worked with their Ghanaian counterparts. The counterparts did observe the Japanese experts closely, and in the interview and workshop, their evaluations were also concrete rather than abstract. In other words, we think that this substantiates just how closely the Japanese experts worked with their counterparts. Naturally, as a result, it seems that there were some experts who were criticized for having poor communication skills, but this too can only be the result of having worked closely with the experts. To varying degrees, the Japanese experts were working within sight of the counterparts. It is because of this close relationship that we may have this view of various types of criticism emerging.

(2) The relationship between counterparts and Japanese experts

The respective features of good and poor Japanese experts and counterparts were as described in the above table, but what was the relationship between them like? We interviewed the counterparts on whether they thought their relationship with the Japanese experts was one of equal footing, and whether they thought it should be. The result was simply "it varies depending on the expert." Certain counterparts were of the opinion that, "In no way was it equal footing. The counterparts were subordinate and the Japanese led with sole discretion." On the other hand, some were of a differing opinion, "It was equal footing. It was a relationship of equal footing where the Japanese experts always listened to the opinions of the Ghanaian counterparts." It seems that the counterparts who responded to the interview had completely different impressions depending on the Japanese experts with which they were involved. In actual fact, in many cases their answers were made on personal bases: "this expert was like this, and that expert was like that." So it is difficult to reach any categorical conclusion. As mentioned previously, because the Japanese experts, who were the key player, were making decisions on the fundamental approach to be taken, and JICA has no guideline for relationship-building, it is understandable that there were huge differences between individuals.

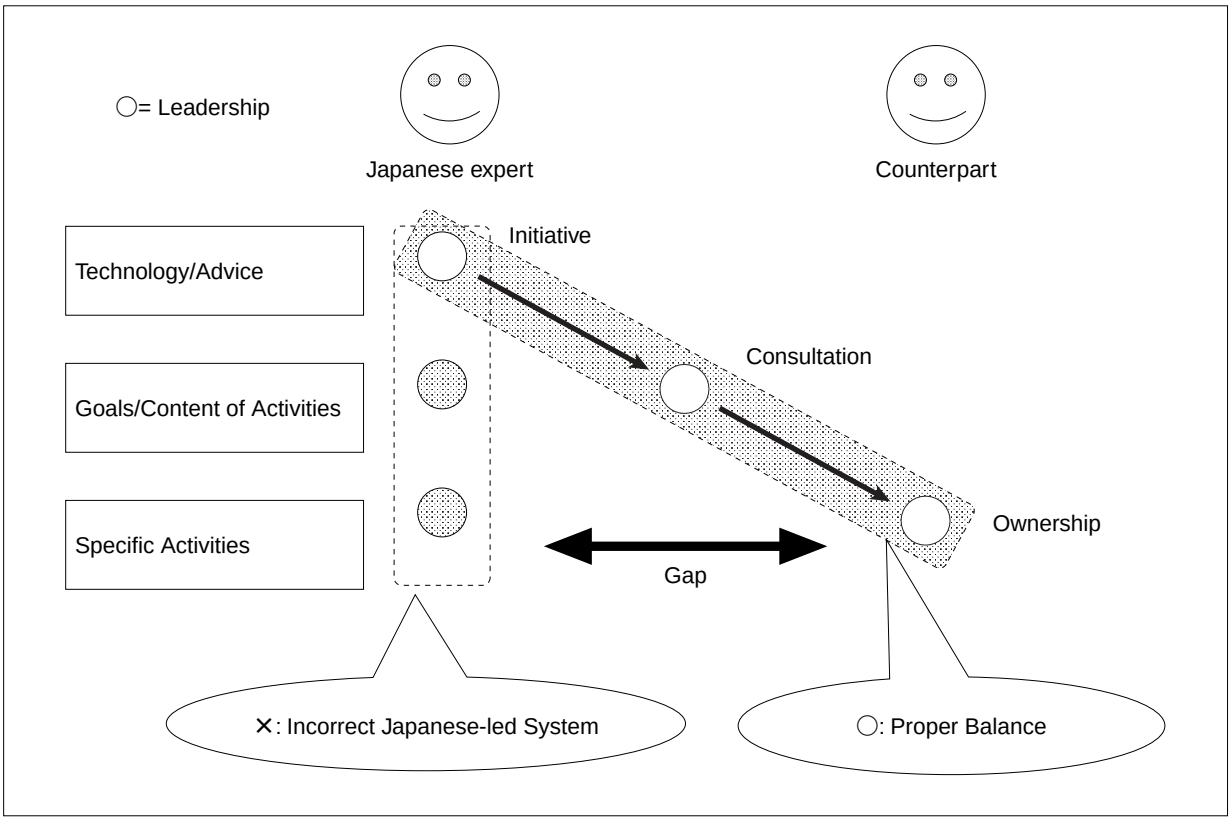
Furthermore, opinions were also divided over the question of whether the relationship should be on equal footing in light of the characteristics of technical assistance, or whether an asymmetric relationship like a "student and teacher relationship" would be better. An opinion of counterparts that most emphasize being equal read, "The positioning of 'counterpart,' as originally used in English-speaking Europe and the U.S., was one of equal footing and with equal authority. In this sense, Japan's 'counterpart' is 'subordinate,' and this is wrong." At the same time, some counterparts are looking at the relationship positively: "As long as technical cooperation is provided, it is understandable experts and counterparts have a relationship akin to a student and teacher relationship." A middle-of-the-road opinion stated, "Because it is technical cooperation, I recognize that, in some sense, the Japanese

experts are technically advanced, but the counterparts have a local knowledge as Ghanaians, so the relationship should be one of equal footing." It is important to understand the fact that opinions as to "what a counterpart is" and "what their relationship with Japanese experts should be" are divided according to each counterpart, as mentioned above.

What needs to be sorted here is the question of in which fields the Japanese and counterparts should have "equal footing" or a "student and teacher" relationship. For example, even if counterparts advocate for equal footing, the counterparts and Japanese will not be the same technically. If this were to be recognized, then there would be absolutely no need to send the experts. Conversely, even if one asserts that the Japanese experts should be in a teacher-like position for the counterparts, technical cooperation would become meaningless if the experts end up doing things themselves which the counterparts are supposed to learn through OJT. The important question is who should take leadership, and where leadership should be taken. We have attempted to sort out the question in Figure 3-1.

According to Figure 3-1, because the Japanese experts feel the significance of their existence through technology, and as an advice provider, the Japanese should take lead and provide accurate advice. At the other end, for specific activities, it would be not beneficial for the counterpart if the

Figure 3-1 Balance and Gap in the Relationship between Experts and Counterparts



Source: Created by author

Japanese experts take the lead. Herein lies the problem of ownership. While the Japanese experts remain committed as advisors, they need to allow the counterparts to implement specific activities and to improve their practical skills. The goals and content of intermediate activities are the ones Japanese experts and counterparts should work together as equal partners by examining what kind of activities to be implemented, and ensuring consistency with their needs and the project purpose. However, if the Japanese experts decide everything from the setting of goals to the planning of activities, and if main activities are implemented under the "leadership" of the experts, conflict will arise with the counterparts, or the counterparts will become detached. Another issue lies in the fact that processes are unfathomed only from outcomes even when the outcomes have been produced through an ideal process, or an incorrect Japanese-led approach. Though performance-based management with the use of PDM or other similar mechanisms has been prevalent, this kind of achievement-oriented management will not be able to be used for the management of process, which is the most important part of Japan's technical cooperation.

(3) Were there any CD effects on from individuals, to organizations and society?

In recommendations made on technical cooperation by the UNDP, the necessity is raised for the provision of comprehensive technical support for the three levels of from individuals, to organizations and society. In contrast, in JICA's reports and articles, public organizations were defined as counterpart organizations, and the staff of those organizations as counterparts; and it is purported that, in this sense, social impacts also can be expected. How, then, does Ghana's case stack up? Table 3-4 summarizes the opinions of the counterparts: In addition to the results in Table 3-4, the counterparts were also asked which of the phases, from the "Individual Expert Phase" to the "Technical Cooperation Follow-up Phase," were most effective for CD. The following trends were observed:

- In terms of technological improvements for counterparts and farmers, the effects were largest during the SSIAPP Main Phase and beyond. This is because, from the Main Phase onward, even more practical technical development and OJT were implemented in the field, and there were more opportunities for counterpart training. There were direct benefits for the farmers in the model districts from this phase and beyond.
- Another view was that each of the phases had distinct objectives, and in this sense, all phases were effective for the counterparts to build CD progressively.
- Meanwhile, it was pointed out from an organizational viewpoint that, as a material impact on GIDA, a large amount of equipment and materials were provided during the Individual Expert Phase and the Mini Project Phase (development center). Furthermore, there was also the view that, as a psychological impact on GIDA, GIDA's frame of reference was broadened through the implementation of nationwide expansion during the Follow-up Phase.

As far as looking at the results of the interviews, JICA's efforts of more than 16 years in promoting irrigation in Ghana brought about psychological changes at the individual level in addition

Table 3-4 Impact of Technical Cooperation on Individuals, Organizations and Society

Level	Impact of JICA's Technical Cooperation (number of opinions)
Individual (Counterparts)	Able to acquire new technology (5) Able to acquire new knowledge (3) Psychological changes, such as sincerity and sense of pride toward work (2) Acquired skills such as time management and administration methods (1)
Organization (GIDA)	Virtually no effects (4) GIDA's awareness broadened. From irrigation to agriculture. To a national level (2) Provision of equipment and materials to IDC; Provision of means to transfer (1) Human resources development for staff (1) Began to recognize IDC as a technology center (1)
Society (Farming Communities)	* Increased volume of agricultural produce (4) * Social impacts, such as formation of farmer organizations (3) Improvement in attitude toward GIDA (1) Developed farmers' knowledge (1) Virtually no effects (1) (* changes limited to only model districts)

Source: Created by author

to technological changes, such as sincerity and a sense of pride toward work. The efforts also had a positive effect on non-technology capacity, such as time management and work methods. Meanwhile, at the organizational level, opinions were divided. While there was the opinion that the material impact of providing equipment and materials to the IDC, as well as GIDA's awareness as an organization, and its activities had broadened, about half of the counterparts who were interviewed stated "there was virtually no effect." It seems that the changes at the individual level were not linked to any changes visible to the organization. During the period that JICA provided continuous support, the truth is that GIDA contracted as an organization, and also became financially weaker. Finally, with regard to the impact at the social level, it has been recognized that there were tremendous impacts in the model districts particularly because substantive activities were implemented in the model districts under the SSIAPP (technical cooperation project). (This has also been confirmed by the opinions of the farmers discussed hereafter.) At the same time, if we take the term "society" to refer to the other districts and the Ghanaian society as a whole, there were no particular activities implemented other than the mostly knowledge-based intervention during the final phase, and the results of the interviews also indicated that there were no recognizable effects on society at large.

This is because JICA has essentially adopted a person-to-person approach for individual-based technical cooperation through close contact. Furthermore, with regard to the institutional development of GIDA, and the impact on the Ghanaian farming society as a whole, while they can be seen as documented in the original written plans, organizational or social involvements were not the specific intent of the activity plans. The truth is, while GIDA has been made the organizational counterpart, the reality of technical cooperation has begun and ended with individual-based cooperation. Naturally, as a

hypothesis made in the abovementioned JICA report, we may rationalize that individual-based cooperation indirectly strengthens organizations which in turn impacts on society. However, it is probably natural to conclude that this kind of social impact could not have been confirmed in a visible form as a result of the cooperation of 16 years in view of the counterparts' opinions, and the fact that GIDA was actually continuously weakened as an organization.

(4) The significance of JICA's technical cooperation

As can be seen in the preceding text, JICA's technical cooperation was preoccupied with mostly capacity strengthening at the individual level despite its long efforts of 16 years. We wonder whether there was either significance in doing so, or whether it was something that reflected GIDA's needs in the first place. Counterparts were asked the following question: "Was the long cooperation of 16 years meaningful? If you could start over again, would you do the same things again?" Looking at the results, 7 out of 9 people responded that "the duration was appropriate," 1 person responded, "too long," and the other person responded that "something that was different from the original objective was achieved."

First, the following points can be raised as reasons for why the cooperation spanning a long period was appropriate:

- Impacts that were only possible from efforts of a long duration have been generated (counterparts' capacity building, and socioeconomic changes in the model districts).
- It takes time to analyze complex situations.
- Farmer assistance is something which takes time in the first place.
- There was significance at each stage (each phase), and counterparts were able to progressively learn new technologies at each stage.

This last opinion is important. In Chapter 2, we remarked on the progressive approach of the Japanese. This gradual or progressive approach has been raised as a characteristic from the counterparts' point of view, and this fact has been evaluated highly. What was impressive were the counterpart's words: "Unlike the projects of other donors, once JICA's technical cooperation starts, it does not lapse. JICA's progressive approach is effective in advancing technology over the long-term." In the first place, CD is something which proceeds in incremental steps, and Japan's progressive approach is an example that proved effective. In this sense, it can be said that Japan's technical cooperation has implemented an approach which is in marked contrast to the simple technology gap-filling approach like that criticized in UNDP's article.

Meanwhile, the response that the cooperation was "too long" refers to there being unproductive periods in each phase, and that each individual phase could have been made shorter. It was an opinion that long-running technical cooperation in itself is significant, but even more things can be achieved in

the same amount of time by clarifying the individual objectives and proceeding in a more efficient manner. Appeals for efficiency or improvements could also be similarly seen in the group that responded that the duration was "appropriate." The following summarizes those views:

- In the beginning, assistance was concentrated only on the IDC, so organizational changes could not be effected for GIDA. If GIDA had been sufficiently involved in the assistance from the outset, there could have been marked organizational effects.
- When a Japanese expert is around, things get done. But the very moment he has gone, things stop. This indicates that, GIDA has not learnt as an organization, and in this respect, improvements are necessary for the approach.
- Counterparts were nurtured over a long period, but there has been a drain of human resources. In this sense, sustainability has been lost.

Essentially, there are no problems as such in the assistance spanning of 16 long years. But with regard to the abovementioned "method of assistance," we think the overall opinion of the counterparts is that there is still room for improvement. Here we would like to pose the question: To what extent were the needs of the counterparts originally reflected in JICA's technical cooperation? Institutionally, Japan acts under a principle of "request-based" support. In principle, under the framework, cooperation can only be provided once there is a need from the Ghanaian side. However, in reality, there is a broad range of case examples. As mentioned in Chapter 2, there are also instances where the direction of technical cooperation is decided with the strong leadership of the Japanese experts. If seen through the eyes of the Japanese experts, there is probably an awareness of developing plans that incorporate the opinions of the Ghanaians, but this is merely an observation of the Japanese experts themselves. Therefore, we need to find out the extent to which the needs of the counterparts were reflected from the viewpoint of the counterparts. The following summarizes the interview results from the question: "Do you think that the needs and opinions of the counterparts were respected and realized by the technical cooperation?"

- It could be argued that they have been satisfactorily respected and realized. (3)
- To some extent. Some parts have not been realized. (4)
- The needs have not been reflected. (2)

The group that responded, "They have been satisfactorily reflected," said that the Japanese experts promoted projects in daily consultation with the counterparts, and that the SSIAPP (technical cooperation project) was what had been sought after by GIDA.

The group that responded, "To some extent," included the view that they were unachievable due to certain constraints on the part of Japan, as well as the view that they were unachievable due to certain constraints on the part of Ghana. Constraints on the part of Japan were mainly caused by namely the fact that financial incentives were not paid to the counterparts. As part of JICA's policies, financial

incentives, such as salary top-ups, are not paid, and there is much discontent toward this point. (Financial incentives will be discussed in detail later.) Furthermore, with regard to the provision of equipment and materials, there were views expressed that the details of such provision were decided by the Japanese experts, and that the views of the Ghanaians were not reflected. Constraints on the part of Ghana refers to the fact that GIDA was unable to sufficiently fund inputs as it should have done (including payment of wages to staff), and do the things as it should have done.

The view that, "The needs have not been reflected," stems from the criticism that the Japanese experts made decisions on purchases and selections of equipment and materials, and the actual equipment and materials that were chosen during the initial stage were not fully utilized. This view is also based on the communication problems between the Japanese side and the Ghanaian side, or between the IDC and the senior levels of management at GIDA. Moreover, it was also pointed out that the problems were caused because GIDA itself did not properly inform the Japanese side its needs, or what it wanted to do in the first place.

Like the previous evaluation of the Japanese experts, reasons for this diverse range of responses related to needs rest on "with which expert," "under what kind of relationship," and "how long the involvement was." Counterparts who had been involved with thoroughly supportive Japanese experts with good communication skills had experienced having their own opinions taken fully into account. For this reason, they might have replied that their needs have been substantially reflected. In the cases where the experts had undertaken the opposite approach, and counterparts had considered their relationship as "one of equal footing," they might have evaluated that their needs were not reflected in the slightest. Suppose the Japanese had undertaken strong leadership, and a counterpart was a type of person who affirmed a student and teacher relation, and thought it only natural, we can probably hypothesize that, similarly, their view will be that their needs have been reflected well.

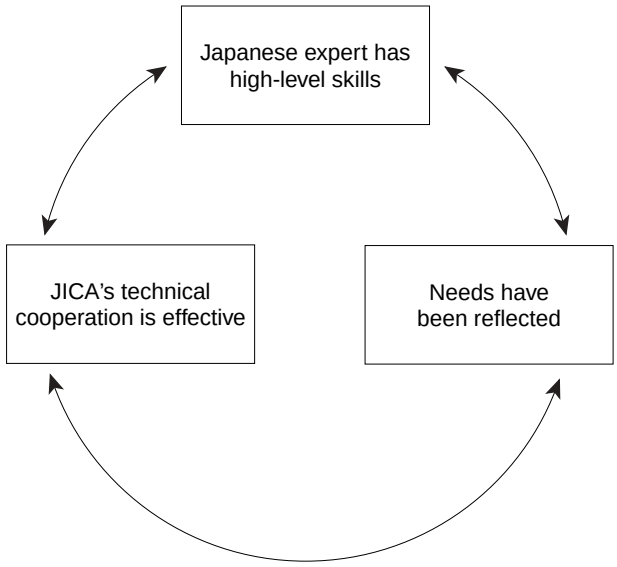
(5) Modeling of the counterpart point of view

Up until this point, we have commented on the views of the counterparts. If we were to outline the interviews individually, there is a tendency for counterparts who gave good reports on the experts to similarly view the project and JICA's overall technical cooperation in a favorable light. Counterparts who evaluated an expert's collective strengths (such as communication skills in technical cooperation) as high determined that their own opinions had been sufficiently reflected in the projects, and that the CD effect of JICA's technical cooperation was high. Conversely, counterparts who were disgruntled with the experts took the view that their own personal views as well as the views of the Ghanaians had not been reflected, and that JICA's technical cooperation had virtually no effect. If a person or object has been given favorable consideration, then it is only natural that there be the tendency for the person to also give the attached organization, country and the underlying technology similar favorable consideration. For example, it is an ordinary phenomenon in school education or training that, if a

teacher is attractive, then the content of that study will be seen as having profound significance, and interestingly it will produce a learning effect.

Of course, this is a subjective issue, and it may also be that there is some misconception on the part of the counterpart. But what is important here is the question, including any of these misconceptions, as to what kind of perception of Japan's technical cooperation the counterparts embraced. When a close-contact type of technology transfer is to be implemented, as with Japan's technical cooperation, the relationship between counterparts and Japanese experts will become extremely important, and the question of how the counterparts view the Japanese experts will be linked to the success or otherwise of the motivation. We can see from the interviews that, when the evaluation of the Japanese experts is good, then this means there will be recognition that their needs have been

Figure 3-2 Counterparts' Recognition Structure



Source: Created by author

Box 3-1 "Critical" Counterparts

In the interviews, there was a broad range of counterparts, but 1 counterpart in particular was negative toward Japan's technical cooperation from beginning to end. He was negative toward the Japanese experts, and the stance of JICA's technical cooperation. In his view, the Japanese experts looked down at the Ghanaian counterparts, and would not listen to their views on project strategies or the selection of equipment and materials. Furthermore, on the topic of the technical cooperation project implemented by JICA, he commented that this was originally a GIDA project, and it was as if JICA had "taken it over" without reflecting the needs of GIDA. The counterpart himself had carried some weight in GIDA, and he had been a key counterpart in projects, participating for a period of time on the management of JICA's technical cooperation project. However, he had been in conflict with the ideologies of the Japanese experts at the time, and it came to pass that he was removed from the project management. Possibly influenced by this, he negatively assessed everything to do with JICA's cooperation during this interview. Furthermore, it was not just with JICA. He held extremely negative views on the development actions of other donors as well. He has his own opinions, and there is no way of objectively knowing whether these are correct or not, or whether there was really an issue with the attitude of the Japanese experts. One thing for sure is that his recognition was built for one reason (for the conflict with the Japanese experts), and he had become categorically negative toward all other matters.

reflected, and the view toward Japan's technical cooperation will be given favorable consideration. Then again, when the relationship-building with the Japanese expert is not successful, then there is a tendency that any effects of Japan's technical cooperation will also be seen negatively. It would be fair to say that the importance of the Japanese experts in Japan's technical cooperation has also been recognized here.

3-2-2 The Reality as Seen by the Farmers

How was JICA's technical cooperation perceived by the farmers? During the Individual Expert Phase from 1988, IDC was built in Ashaiman, a suburb of Accra. Then since 1997, technical cooperation project activities targeted at the same district has been continuously done. The history of this district began with the completion in 1968 of the gravity-type irrigation system funded by the Government of Ghana. This led to farmers migrating, and the formation of the district. Following this, in 1969, the planting of rice began through the technical cooperation of Taiwan. Then in 1972, this was superseded by China's technical cooperation, and its technical cooperation for rice cultivation continued until 1976. Then, in 1977, the management was transferred to GIDA. Finally, about 10 years later, with the construction of JICA's IDC, once again, the area became a target district for technical cooperation.

In this study, we had farmers from the Ashaiman district gather, in order for the results of JICA's technical cooperation to be evaluated through the eyes of the farmers. (Gender: 3 males, and 3 females; Ages: 1 in his or her 60s, 4 in their 50s, and 1 in his or her 30s) The workshop-format was the method adopted.

(1) The pattern of improvements to agricultural production and farmers' lifestyles as seen by the farmers

First, we asked the farmers to show the trend of how volumes of agricultural production had changed from 1965 to the present date. While the trend line is nothing more than the farmers' own subjectivity, it is connected to the farmers' own day-to-day feelings, so it is informative. According to the trends, up until the 1980s prior to aid being introduced from Japan, production volumes were severely influenced each time there was a drought or similar event. With irrigation facilities being aged, and irrigated land areas being decreased, the farmers were only just managing to get by. During the course of this period, technical assistance had been provided by China and other donors. However, the effects were limited to the short-term, and agriculture continued precariously in the medium and long term. Following this, as shown by the line, the farmers' impression was that there were sudden improvements, in particular after the start of the SSIAPP. However, this was not so much affected by the technical cooperation, but was greatly affected by the improvement of irrigation facilities through grant aid at the same time as the SSIAPP. Japan's technical cooperation, including the individually dispatched expert and mini projects, had begun prior to the SSIAPP, but the farmers' impression was

that the effects were actually realized through SSIAPP, which started in 1997. An interesting phenomenon was that the farmers were of the impression that market mummies (brokers) helped the farmers during the 1990s. Usually, brokers tend to have an image of exploiting farmers, but it was recognized that they also performed a role as a supporter.

From just looking at this trend, though IDC was established in the Ashaiman district under the leadership of the individually dispatched expert from 1988, and activities linked to research projects had continued, it would be fair to say that there was virtually no impact on the farmers prior to the SSIAPP (namely, the technical cooperation project). During the SSIAPP, direct intervention in the farmers began, and the growth in agricultural production from this time is spectacular. The evaluation data from the time of the conclusion of SSIAPP also substantiates the fact that agricultural production increased exponentially. And it was not merely increases in production. As stated by the farmers

Figure 3-3 The Trend of Changes in Agricultural Production

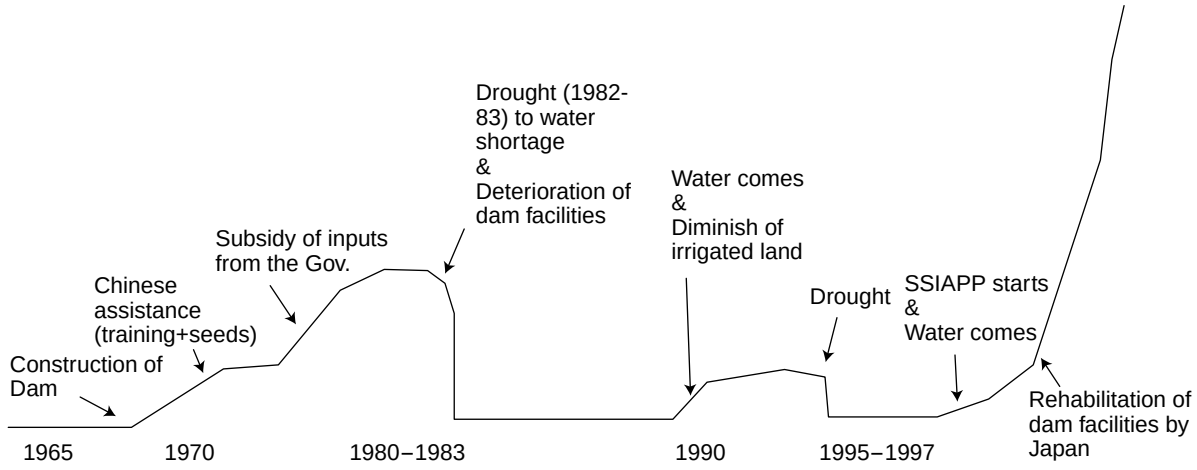


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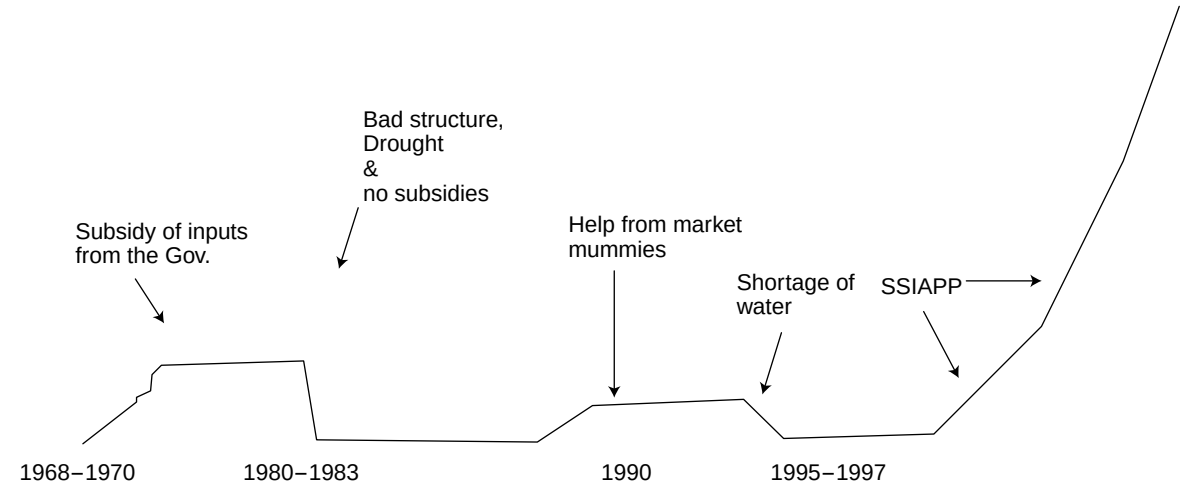
Figure 3-4 The Trend of Changes in Farmer Incomes



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themselves, there has been the huge social impact of stabilizing agricultural production, which used to be subject to the amount of rainfall, and stabilizing the lives of the farmers.

(2) Effects of technical cooperation as seen by the farmers

It could, however, also be argued that the direct and material intervention, including the improvement of facilities and other hardware aspects, was instrumental in this dramatic improvement. Let us examine the question: What exactly was the extent of the impact from the technical cooperation? During the workshop, we had each of the farmers select 5 reasons why agricultural production was improved, and we had them evaluate each effect using the "public assessment" technique. (Rather than a "1-person 1-vote" system, the "public assessment" technique is a method where each voter is given multiple votes to allocate at their discretion, and the votes for each candidate are tallied. For example, supposing a voter has 10 votes and 3 options (A, B, C), and the voter wants to select both A and B, 5 votes will be cast for A and B respectively. In this study, each farmer had ten votes, and to avoid any group bias, the farmers were called to vote 1 by 1.)

Table 3-5 shows the results. As can be seen in Table 3-5, the most significant result was that the honest impression of the farmers was that the improvement of the irrigation facilities (47 %) had been most effective. Next was inputs, such as fertilizer, that had become available with the establishment of the Farmers' Bank (28 %). In contrast, technical training (8 %) was not evaluated particularly high. It is evident that the farmers believed that the most significant effect generated was from the improvements to agricultural facilities, and other facilities and equipment. Even during the research project phase prior to the SSIAPP, technical training for rice cultivation was conducted sporadically. However, according to the testimonies of the farmers, and related documents, there was no mentioning that agricultural production had actually improved by technical training. In other words, one could argue that the exponential growth in agricultural production could not have been possible without the cooperation provided for facilities and equipment.

On the other hand, this is not to say that the effects of software aspects were weak. It is believed that cooperation in terms of the software aspects for facilities and equipment, such as the operation, maintenance and water management of irrigation facilities, and the system for the collection of irrigation service charges, was instrumental in augmenting the effects from the improvement of facilities. Furthermore, in order to establish the Farmers' Bank as an institution, technical cooperation for securing its sustainability was a crucial factor, in addition to the mere provision of source materials. The truth is, irrigation facilities already existed in this district, but they had deteriorated. It was not simply a case of their being no money to fund the improvement costs, but part of the reason was because the farmer-led maintenance was not sufficient. If only facilities and equipment had been needed, surely the state of the irrigation facilities in Ghana would not have fallen into such a state of neglect. It may sound like a cliché, but the fact is that an even greater impact was able to be produced

Table 3-5 Reasons for Improved Agricultural Production, and their Respective Levels of Effects

Reasons for improved agricultural production	Score	%	F1	F2	F3	M1	M2	M3
Fertilizer and other inputs courtesy of the Farmers' Bank	17	28 %	2	3	2	3	3	4
Technical training	5	8 %			2	2	1	
Improvement of irrigation facilities	28	47 %	5	5	5	5	4	4
Provision of farming equipment	7	12 %	3	1	1		1	1
Provision of seeds (high-quality seeds)	3	5 %		1			1	1
Total	60	100 %	10	10	10	10	10	10

F: female farmer; M: male farmer
Source: Created by author

through cooperation for both hardware and software aspects combined.

The farmers were optimistic about whether they could continue their activities by themselves following the SSIAPP. The opinion of the farmers was that repayments to the Farmers' Bank were on target, the farmers' organizations were solid, and the farmers were basically able to maintain the facilities themselves. They said that if they had sought something from Japan, what they would want was further technical guidance on cultivating vegetables, and the feeling was that regular, short-term guidance would be sufficient. The fact that the farmers have this kind of confidence toward sustainability is probably the result of JICA's long and practical technical cooperation. In terms of social impacts, in particular women's position in society, female farmers are aware of the substantial improvements as a result of the organization of women for which the Japanese experts had strived, especially during the SSIAPP phase. They said that, as it turned out, they gained confidence because they became able to make rice themselves, and they no longer depended on males financially. In this district, since there are more than a few farming households which are supported by women, it appears that the impact was particularly great for these types of farming households.

(3) Impressions of the experts

In order to ascertain the extent to which Japanese experts came in contact with the farmers, and to ascertain the way in which the contact was made, we interviewed the farmers on their impressions of the experts. I had the farmers give names as best they could recall, and asked them to speak freely on their impressions of each of them. Box 3-2 contains a fragment of what they said.

As depicted in Box 3-2, farmers seem to have strong impressions of experts, and in particular of experts who were played an active part close to the farmers. Furthermore, their evaluations were extremely specific and good. 1 expert in particular (Mr. Z in Box 3-2) was a person who, in the words of the farmers, was like a "god." He worked together with the farmers, and provided equipment, materials and other objects according to the needs of the farmers. However, this same expert drew

Box 3-2 Farmers' Impression of Experts

"Mr. X is 'hardworking,' and does not seem to like 'non-hardworking' Ghanaians. He also created a forest around here by planting lots of trees."

"Mr. B likes interacting with people. He promoted 'cleaning day' when all the people would clean up around the place. Apparently, this was well received by the farmers too."

"I do not remember so much Mr. Y. On the other hand, I remember well '○○' who was one of JOCV staying here at around the same time."

"I do not remember much about Mr. A."

"Mr. Z is a good person. He has the heart of a farmer. He also built us this meeting hall. He formed a women's group, and taught us how to make rice. He also planned a bread-baking project and purchased us equipment and materials, but we have not been able to build a facility (shed) to house the equipment and materials, so they are not being used."

"Mr. M is a good person." [We were unable to ask specifically in what way he was good.]

"Mr. N is a good person, and interacted well with us." [However, there were also farmers who did not know him.]

"Mr. H is a straight person. He did not interact much with others."

criticism from the counterparts as being poor at communicating and for not listening to the needs of the counterparts. Judging comprehensively the views of the farmers, the counterparts, and the other relevant people who had knowledge of the circumstances, this particular expert appears to have worked, more through direct contact with the farmers than with the counterparts. In this way, evaluations emerge which are a complete about-face from other evaluations, and we believe that this day-to-day communication and relationship-building are the keys to determining just how much of an impression is made. This is the same as the relationship between counterparts and experts, as mentioned previously, and it made us realize the importance of personal communication.

3-2-3 Survey Results by Theme

As part of the field study, we interviewed relevant people on the theme of the "pros and cons of financial incentives," which was raised in Chapter 2 as an issue of Japan's technical cooperation. We also interviewed them on the theme of "their thoughts on the technical cooperation of other donors" for a comparison with Japan. In this section, we will discuss an overview and analysis of the results of those interviews.

(1) The pros and cons of financial incentives

In Chapter 2, we gave an overview of Japan's long history of technical assistance in Ghana. The one thing that has left all the experts puzzled has been the issue of "financial incentives." In a case like Japan's transfer of technology from individuals to individuals, the attitude of the counterpart, who is the recipient of the technical cooperation, is a crucial factor. Various types of incentives can be thought of that motivate the counterparts, but the very first thing that the Ghanaian counterparts express is "financial incentives." The following types of financial incentives are possible.

① Extra compensation on top of wages and salaries (Top-up)

② Project charges (Honorarium/Remuneration/Overtime Allowance)
③ Daily allowances when participating in training, etc. (Sitting Allowance)
④ Accommodation costs and daily allowances which are necessary for field trips, etc. (Travel Allowance)

Due to the problem of allowances being provided to personnel of public institutions in partner countries, as a matter of policy, JICA does not approve of the above financial incentives ①, ② or ③. To begin with, such provision is outside their jurisdiction, and there are also fears that financial incentives will harm the long-term sustainability of the partner and lower their morals. (However, there have been cases where such payments have been made at the individual discretion of the expert on a piecemeal basis.) Furthermore, with regard to financial incentive ④, any payment is kept to a level equivalent to the domestic level. On the other hand, there are some cases where the payment of counterparts' wages is in arrears, or the wage levels are too low to begin with, such that the counterparts cannot even pay for the gasoline to get to the field, and they request some kind of financial incentive from the donors. Still further confusion is added to matters by the fact that some donors (a very small portion) do pay incentives, and others make payment through those in charge of the field, or those of similar responsibility despite their policy prohibiting such payment. These kinds of examples may be small in number and they may be being conducted on an exception basis, but for the counterparts, they lead to discontent, claiming, "Other donors pay incentives, so why won't Japan do?"

As part of this study, we gathered GIDA staff together for discussion in a workshop format regarding the pros and cons of financial incentives. The purpose was to first sort out the question of why financial incentives are necessary according to the logic of counterparts, then come to an understanding of the necessity and effects, and finally to explore alternatives for other incentives. At the beginning of the workshop, we divided the counterparts into 2 groups, and had them perform a role play, with one group being GIDA (Ghana team), and the other group being JICA (Japan team). The idea was for the Ghana team to list "why financial incentives are necessary," for the Japan team to list "what is wrong with financial incentives," so the 2 teams could debate with each other. The trial went amiss from the start because initially none of the counterparts wanted to join the Japan side. More than not wanting to join, it was more a case that they "had no idea why financial incentives were wrong," even if they did join. Consequently, we had a former Japanese expert who was traveling with us act as an assistant on the "Japan team." On this basis, the counterparts agreed to participate in discussions, and the workshop proceeded. Table 3-6 shows the results of the discussion.

As can be seen in Table 3-6, with respect to the affirmative opinion on financial incentives, although there are a number of overlapping areas, the counterparts were able to reel off reasons with hardly any effort. We can broadly divide these opinions into 2 categories. One of them is financial incentives as motivation. The logic is that incentives are linked to the resulting outcomes of the project.

Table 3-6 Arguments For and Against Financial Incentives

Why are financial incentives necessary?	What is wrong with financial incentives?
• They raise motivation. • They allow people to concentrate on work. • Counterparts become more innovative. • There is more time for work. • Fairness at work (differentiates between those counterparts who work hard and those who do not). • They raise the quality of outputs. • They achieve the results of the project. • They contribute to achieving the project purpose. • We do not have any financial incentives at all. • The real income of the counterparts is low. • For the happiness of the counterparts' families. • To prevent counterparts transferring to other employment. • The counterparts become more involved with the farmers. • For better relationships between counterparts and experts.	• For sustainability once the project is complete. • Aid recipient countries have roles and responsibilities. • Tax-payers frown upon "spoon-fed" type aid to aid recipient countries. • Aid recipient countries will stop having serious discussion on fiscal policies. • Technical cooperation is not for assisting individuals, but for supporting development.

Source: Created by author

The second category is incentives as a form of income for social security. The notion of becoming reliant on aid from Japan also "for the happiness of the counterparts' families" is beyond the comprehension of the Japanese way of thinking, which demands the so-called "attitude of self-sacrifice." As far as the counterparts are concerned, they are probably seeking fair compensation for their work, so we can sense a cultural gap between the ways the Ghana team and the Japan team respectively perceive financial incentives. On the other hand, there are not so many negative opinions toward financial incentives. More than just being few in number, through our observation on the discussion, it seems that it was only after considerable assistance from the Japanese expert that the participants at last came forward with opinions. As can be seen here, the counterparts did not fully understand the reasons why JICA did not provide financial incentives. According to the Japanese expert, who accompanied us, apparently explanations were sometimes given to the counterparts as to why JICA did not provide financial incentives, but it was evident from looking at these results, that the counterparts had not understood the reasons. To a certain extent, this may be due to the explanation on the part of the Japanese being inadequate, but another part of the reason is most likely the counterparts not accepting the explanation, and because there exists an underlying cultural gap.

During the workshop, discussion was also held on whether there should be any incentives other than financial incentives. Table 3-7 shows the opinions of the counterparts. As can be seen in Table 3-7, the one incentive that is recognized as being highly feasibly and highly effective is training in Japan or a third nation. However, attention needs to be drawn to the fact that the counterparts have real expectations that, by participating in training, they will be provided daily allowances related to the training, and that they will receive a range of other benefits. If we look at the other proposals, despite

Table 3-7 Counterpart Thoughts on Incentive Alternatives

Non-Financial Incentives	Responsible entity (payment)	Feasibility/Motivational Effect
Increase of participation in training in Japan	Donor	High / High
Training in third countries	Donor	High / High
Health funds (mutual aid funds)	Project	Low / High
Advances on wages	Project	Medium / High
Performance-based income distribution	Project	Low / High
Awarding of outcomes-based certificates of merit	Project	High / Low
Support directly linked to income	Project	Low / High
Income through consultant service	Project	High / High

Source: Created by author

the fact that they were asked to give ideas for non-financial incentives, almost all of the ideas end up having some kind of indirect monetary relationship. The only incentive that is truly "non-financial" is "outcomes-based certificates of merit." Even so, its motivational effect was ranked as low. Since the theme of the workshop was "arguments for and against financial incentives," it was inevitable that their opinions would be drawn toward such a topic, but the fact that the views given by the counterparts focused mostly on finance-related ideas was a consequence of just how much financial incentives were of great concern. It is not entirely the responsibility of the counterparts that this kind of mindset has taken root. The Government of Ghana, which cannot properly pay their wages, also has responsibility, and the donors are also partly responsible. What made a lasting impression during this workshop were the words uttered, as if venting their frustration, by a Ghanaian counterpart who had always appeared cheerful and witty: "You say that if counterparts are provided financial incentives, then after the project, sustainability will disappear. But... to begin with, it's difficult enough just carrying on with our everyday lives, so much so that we cannot give our 100 % to the projects. Before sustainability, isn't the problem to do with the actual running of the project!!"

At the same time though, there is also hope in sight. At the beginning of the workshop, we asked the counterparts at what times they felt "happy" or "unhappy." The results are shown in Table 3-8. As shown in Table 3-8, the lack of financial incentives was the most common reason given for unhappiness. Meanwhile, as reasons for happiness, they gave being able to participate in activities as part of the project, and the associated sense of achievement; and gaining a variety of experiences during the training in Japan. Herzberg's theory of motivation in business management cites "hygiene factors and motivation factors." Based on a range of experimental testing, it has been demonstrated that there is a wide range of factors that motivate people, and that, although financial factors are a source of discontent, they are not a source of motivation.

- Factors that produce satisfaction
  "Achievement," "Approval," "Work itself," "Responsibility"
- Factors that produce dissatisfaction
  "Corporate policies and management," "Supervision," "Relationship with supervisors," "Work conditions," "Salary"
- Factors that produce both satisfaction and dissatisfaction
  "Advancement," "Growth"

According to this theory, rather than motivation factors being monetary, they include being recognized for one's performance and work, and the work in itself. In contrast, it is purported that no matter how much wages and other allowances are improved, they will not lead to motivation though a person's level of discontent may fall. If we look at the results of the counterparts in Table 3-8, financial problems appear to be sources of discontent, but it is unlikely that money is one of their motivations. While a basic income should be assured, it appears that such factors given by the counterparts for their happiness, as "participation in activities," "a sense of achievement," and "a wide range of experiences gained through training," trigger true motivation. Even during the workshop with the counterparts, an opinion was voiced that "Other donors give financial incentives, whereas JICA doesn't give us any." Let us look at what the reality is. During this study we had the good fortune to interview representative donors in Ghana on their philosophies. Table 3-9 shows the views of people at the field manager level from each of the donors. Table 3-9 shows that, with the exception of the International Water Management Institute (IWMI) and Care, other donors were not providing large amounts of financial incentives. As illustrated, the majority of donors in Ghana are opposed to financial incentives. This

Table 3-8 Counterpart Happiness and Unhappiness

Counterpart	Happiest time as a counterpart	Unhappy/difficult time as a counterpart
A	Participatory-approach training, and resulting development of workshop methods.	When a certain proposal was rejected by the expert.
B	When the SSIAPP (technical cooperation project) began.	The incentives during training are low.
C	When I could contribute to the development of the guidelines and strategies.	There are no outcomes-based financial incentives.
D	When I undertook training at Tsukuba (I was able to interact with people from various countries.).	When the results of my work were not recognized.
E	Training at the TBIC (JICA Tsukuba International Centre).	When financial incentives were not approved at the end of the project.
F	When I was able to present the results of the SSIAPP in Kenya.	When I was grilled by the expert for something that was no fault of my own.
G	When the full-scale SSIAPP training began in 2000.	When I found out that there were no financial incentives.

Source: Created by author

Table 3-9 Donor Thoughts on Financial Incentives

Donor/Person Questioned	On the subject of financial incentives
FAO (Representative from Ghana Office)	The project coordinator is an employee of the Government of Ghana, however, no associated compensation or top-up is paid. The policy is to not pay out any direct top-ups. However, staff travel expenses, fuel for vehicles, and daily allowances are paid. Examples of daily allowances include US$ 80 per night for field trips to Kumasi, and around US$ 59 per night for field trips to other rural areas.
World Bank (Expert on natural environmental management)	Their policy is to not pay out top-ups. The principle of not covering salaries had already been adopted 10 years ago. An example of daily allowances is 350,000 cedi (per night) for middle-echelon employees. Even for ministerial ranks, the allowance is not set terribly high, at 500,000 cedi.
DFID (Expert on village development)	The DFID policy is not to pay out top-ups. Sitting allowances (the payment of money for merely participating in workshops or meetings) are also not authorized. Since 1990, such payments have not been made, and even in project documents, it is clearly stated that top-ups will not be provided.
EU (Agricultural Policy Advisor)	Financial incentives are not paid in Ghana. There are instances of payments being made at other EU Offices in Central and South America, but not in Ghana. However, payments of 32 to 35 euros are made for daily allowances for business trips. These payments are kept low, and excessive payments are avoided.
CIDA (Policy Advisor)	CIDA does not pay out top-ups. Up until now, in Ghana, these payments have never been made. With regard to daily allowances for accommodation expenses, payment is made on a basis of amounts required for actual hotel and meal charges. At present, a consultant has been engaged to examine this, and CIDA is considering setting charges to minimum amounts based on the findings in the future.
GTZ (Head of Ghana Office)	GTZ does not pay out any top-ups whatsoever. Naturally, they provide hotels when conducting seminars, but they provide very hotel rooms and meals, rather than paying out money.
IWMI (Representative of West Africa Office)	IWMI does pay financial incentives. In order to maintain equity, they also provide disbursements for each outcome (deliverable) instead of mere top-ups.
Care International (Representative from Ghana Office)	Care does provide financial incentives. Care has an established level, but when a local NGO has its own rate, Care matches that. For example, when participating in a project, and increasing staff numbers, payment of about 8 % is made for their salaries and expenses, or top-ups of 5 % are paid. Compensation for salaries is made, but daily allowances are not paid. This is totally different from government-run organizations.

Source: Created by author

point shows that, amongst the donors, JICA's policy is not necessarily unorthodox, but instead is mainstream. Prior to this survey, the hypothesis was that "almost all other donors besides JICA are providing financial incentives," however, this proved to be a misconception.

However, what we sensed through the interviews was the fact that there is conflicting information even among the donors. When one donor said that a certain donor "seemed to be giving out incentives," we went to hear what the donor in question had to say. On the contrary, it turned out that they did not provide incentives. We repeatedly heard that the African Development Bank (AfDB) and the International Fund for Agricultural Development (IFAD) did provide incentives, however, we have been unable to confirm this due to the time constraints of the study. While they cannot provide incentives at the policy level, there may be some organizations that manage somehow to "squeeze" financial incentives out by juggling the funds at the project base level. Consequently, the actual reality

is still unclear. Currently, the Canadian International Development Agency (CIDA) is leading a comprehensive study into financial incentives in Ghana. The results of this study should clear up the question of how much is actually being paid by which organizations.

On the question of why the organizations do not provide financial incentives, they are in accord with JICA's argument. They asserted that their substantial reasons are that "from the perspective of sustainability, financial incentives are ineffective, and have many adverse impacts." As institutional reasons, they also asserted, "This is not a question of motivation, but rather a policy question on Ghana's public servants salary system." In this respect, the assertion was the same as JICA. On the other hand, we also heard the claim from donors who provide general budget support to national treasuries, such as DFID and CIDA, that, "We have been already providing support for financial incentives through general financial support, and it is Ghana's responsibility as to how these funds are used. So as donors, we have already played our part."

One thing we heard repeatedly in each interview was that Ghana was too concerned with "matters which were unrelated to development," such as financial incentives and other benefits (provision of vehicles), and that there was a sense of crisis that Ghana was not able to conduct any actually meaningful discussion on development. The fact of the matter is that this has gone too far, and Ghana is not nurturing any ownership of development. It has caused morals to degenerate such that Ghana will not cooperate in projects run by donors that do not provide financial incentives. Those donors who have provided financial incentives for short-term objectives and those who continue to provide such incentives under this kind of situation must bear a heavy responsibility.

(2) Is technical cooperation out-dated?

At present, donor circles in Ghana are rushing toward a shift from technical cooperation to budget support for the Government of Ghana. We were also able to fully sense this trend from the interviews. In addition to this, in the case of GTZ, although they do not provide financial support, their affiliate organization, the German KfW, participates in multi-donor program-type funds. The World Bank also has a system to have Ghanaian communities write up project proposals, distribute appropriations through local governments, and entrust the management, including the associated budget control, up to the local governments. (Refer to Box 3-3.)

In this way, donor circles are in the process of shifting from bilateral aid to multilateral aid, and from field-based technical cooperation to policy-level budget support. Furthermore, while it may not go as far as financial support, adopting the approach of permitting the involvement of the Government of Ghana to the greatest extent possible, similar to an approach taken by the World Bank, is becoming mainstream. As for a background for this shift, it appears as a result of the interviews that certain reflection on the approach adapted to date, and certain circumstances of the donors had helped trigger

Table 3-10 The Trend of Donors Providing Budget Support

Donor/Person Questioned	Trend of budget support
DFID (Expert on village development)	Over a span of 4 years, DFID has been providing general budget support (Multilateral Development Budget Supports (MDBS)). In terms of scale, half of its £ 70 million budget is being disbursed from this scheme. Currently, DFID is taking this kind of multilateral approach in the fields of health, education and land management. Its only remaining bilateral aid projects are its forest management project and its bridge and feeder road development project. According to its representative, this trend of pulling back from bilateral aid is set to continue further.
EU (Agricultural Policy Advisor)	The EU provides 2 concurrent lines of assistance: technical cooperation and budget support. For example, for the development of social infrastructure, the EU takes the initiative through experts on technical cooperation, including project administration. For mining development in the field of social infrastructure, it has handed leadership over to Ghana, and provides a budget according to the proposals put forward by Ghana. In farmer development, technical support is essentially provided for farming. The reason behind this is that Ghana does not yet possess adequate technical capabilities to take the initiative in the farming sector, so it needs assistance from EU experts. In contrast, in livestock farming, Ghana possesses advanced technologies, such as technology for identifying diseases in animals, so the EU plays only a financial role with Ghana taking the initiative. In economic assistance, the EU provides budgetary aid, but it does not just supply funds, but also conducts audits. This year, a massive audit was conducted, and the EU plans to adjust the amount of aid depending on the results of the audit.
CIDA (Policy Advisor)	Implementing a major shift toward budget support is not just CIDA's policy for Ghana, but it is its global policy. CIDA provides budget support to the MOFA (Ministry of Food and Agriculture). Management was initiated in 2003, however, it was not simply entrusted to the partner country in the first year when a program for research and extension was implemented. Full-scale support has been implemented since 2004. Management is positioned within the Government of Ghana, and audits too are processed using Ghana's audit system. Management performance is monitored using process indicators, called "triggers." (There are 13 indicators - for example, the timing of budget provision, the recipients of budgets, and the appropriateness of written requests for approval.) CIDA examines these triggers once a year, and may make adjustments to the amount provided when there are any problems. Furthermore, the amount of their budget support is decided once the national budget has been handed down so that CIDA's financial support will not be treated as a replacement.

Source: Created by author

Box 3-3 The World Bank's Community Based Rural Development Project (CBRDP)

This is a project for rural development, and there are instances where small-scale irrigation is included as a component in the project. A typical example is farmers paying irrigation service charges, providing maintenance, and establishing a management committee for the promotion of autonomous management.

CBRDPs adopt a demand-driven approach, and are a system whereby communities independently devise development plans, submit these to a District Assembly (DA), and with its approval, a fund is appropriated from the World Bank. With regard to funds, farmers assume 5 % of the total cost, and the DA bears approximately 10 %. The DA has responsibility for actual supervision, and the community has responsibility for day-to-day management. In doing so, this leads to CD for Ghana. Naturally, local consultants are employed for areas of management that cannot be adequately managed by themselves (human resources, procurement, finance, and M&E), but it is the DA that selects local consultants. Furthermore, the state government provides backstopping.

The philosophy is to nurture a sense of ownership by entrusting management completely to Ghana. The level of involvement by the World Bank is no more than staff from the World Bank providing occasional technical backstopping, and a supervision mission being sent for about two weeks once a year so as to gauge a general overview. Furthermore, the World Bank directly appropriates a budget (US$ 100,000) for technical assistance, and it may use these funds, if necessary, but essentially ownership is transferred to Ghana.

the shift.

Reasons for reflection

① In the technical cooperation project, the experts had worked by themselves, and this had not been at all beneficial to improving the technology of the partner country. Ownership had degenerated.

② There was too much of a difference in the salaries of the consultants and the staff, so motivation degenerated.

③ Government agencies have become a bottleneck for development, and are not facilitating promotion. (It is better to support target groups directly.)

Donor circumstances

① Due to issues such as Millennium Development Goals (MDGs), which cannot be resolved by a single country, harmonization among the donors became necessary.

② Governance became necessary in order to respond at the government policy level.

③ Because of budgetary cuts, it became necessary to manage funds more efficiently using the "common basket" method.

Although these circumstances have led to an acceleration toward support for general budget, it was surprising that, in the interviews, we heard a number of times from the representatives of DFID and CIDA, who were promoting budget support, that "they understood that budget support involved a substantial risk." There is an impression that, at the policy level, their policies are written in a confident manner, demonstrating a clear direction for budget support, but at the actual management level, they do not believe that the provision of budgetary aid is the more effective "answer"; and that as part of trialing a variety of approaches following technical cooperation, they have been trialing this method as a breakthrough measure, and are now observing its effectiveness. From examining the philosophies of the respective donors toward technical cooperation, we can see that they have not actually dismissed the notion of technical cooperation.

As can be seen here, although some donors, such as the NGO Care International, have taken a negative standpoint, the philosophy of all other donors is that they do not identify technical cooperation as being something that is out-dated or unnecessary. On the contrary, those donors who are rapidly heading toward budgetary aid despite its effects remaining obscured think that technical cooperation is an important approach that complements the shortfalls of budgetary aid. At the same time, like Japan, the importance of technical cooperation in practical fields is fully understood. With other donors shifting from technical cooperation to budget assistance, and causing the void to widen in the technical component which is integral in the development of Ghana, it is conceivable that there will be an even greater need for Japan's technical cooperation.

Table 3-11 Donor Thoughts on Technical Cooperation

Donor/Person Questioned	Thoughts on Technical Cooperation
FAO (Representative from Ghana Office)	I regard technical cooperation at FAO as a pilot-type project prior to nationwide expansion. In one of our technical cooperation programs, we implemented water management for irrigation and provided guidance to farmers in 2 or 3 small irrigation districts over 2 years. We plan to implement the technical program on a large scale (30 to 40 districts) for expansion through an improved approach after evaluating the effects of the technical program, analyzing any problems, and clarifying what the problems were.
World Bank (Expert on natural environmental management)	I see the merit of Japan's method (namely technical cooperation) as being the fact that there will likely be direct effects of technology transfer from providing direct technical assistance, and that methods suitable for Ghana can be designed by the Japanese being directly involved with the counterparts. The downside is that the balance is difficult. For example, even if an expert teaches how to drive a car, if the expert is always driving the car, the counterpart will not learn the driving techniques. The truth is that there are numerous examples like this. (Omitted) The Government of Ghana should be made to undertake sound analysis, and then, once the needs of the Government of Ghana are known, consideration should be given as to whether to incorporate technical cooperation.
DFID (Expert on village development)	JICA is making improvements to roads and other parts of social infrastructure, and I believe that this is more beneficial for practical purposes in comparison with policy advice. It is an essential factor in generating synergistic effects from technical cooperation. The concern for contemporary technical cooperation, though, is that engineering is gradually becoming less and less in the field of cooperation. Given the impact on social infrastructure, engineering technology is essential. In this regard, I think there is a need for Japan's technical cooperation.
EU (Agricultural Policy Advisor)	We provide technical cooperation depending on the field. In the field of agriculture, we have basically adopted an approach of technical cooperation. Even if budget support were provided in this area, I do not think that the Government of Ghana would have the management skills in the first place. Even if budgetary aid were provided, it would barely reach the lower levels. In the past, financial assistance has been provided through MOFA using AgSIP, but there has been virtually no impact in the field. Additional infrastructure is needed so that the effects can be felt directly in the field. In contrast, Ghana has capabilities in fields such as education and health, so I do not think that technical cooperation would be necessary here.
CIDA (Policy Advisor)	CIDA provides both technical cooperation and budget support. Developing countries like Ghana have technological gaps and financial gaps. CIDA provides budget support for the latter, and technical assistance especially in the north for the former. Accordingly, I do not think that technical cooperation is unnecessary at all. In the future, budget support will continue and expand, but this might be only temporary. The technical assistance provided by donors like JICA and GTZ does have positive effects. We are considering what we can do as a package, rather than either technical cooperation or budget support.
GTZ (Head of Ghana Office)	GTZ promotes technical cooperation. The reason why technical cooperation is necessary is the fact that outsiders' insight and advanced technology are necessary, and there are expectations that the expert will also act the role of a facilitator. Both short-term and long-term experts are necessary. It is no good to just simply provide money alone as general financial support. However, I think that through the provision of budget support, adjustments can be made to the policies and structure of the partner government, management capacity can be developed, and improvements can be made to the situation caused by the assortment of multiple donors. Harmonization is necessary, rather than a question of either technical cooperation or budgetary aid.
IWMI (Representative of West Africa Office)	With regard to technical cooperation, the question of "where" and "how" technical cooperation should be provided is more important than the question of whether technical cooperation systems are effective. In this sense, I think that technical cooperation is effective. General budget support is not practical for Ghana.
Care International (Representative from Ghana Office)	On the flip side of technical cooperation is general budget support, but it is unthinkable that either of them are effective. In Ghana's case, individual capability and personal connections are the key determinant factors in everything. In other words, there is no system. For example, donors such as GTZ and DFID have placed experts in MOFA, and they are able to promote individual projects, however, it is not realistic that they be able to promote structural improvements. Financial support only strengthens the control of the central government, so even if the central government were to change, there are a number of barriers to overcome before the support would filter down to the lower levels.

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Chapter 4
Effectiveness and Problems of JICA's Technical Cooperation, and Recommendations

Aim of this chapter: In this chapter, we will analyze the effectiveness and problems of JICA's technical cooperation for supporting the advancement of irrigated agriculture in Ghana from the perspective of CD, and present various propositions for overcoming the problems while making full use of the effectiveness.

4-1 Analysis of the Effectiveness and Problems of JICA's Technical Cooperation in Ghana's Irrigated Agriculture

In this study, we have analyzed the effectiveness and problems of Japan's technical cooperation by tracing the history of JICA's support for the promotion of irrigated agriculture in Ghana, and we delved into the deeper aspects, such as the relationship between the Japanese experts and counterparts and their respective feelings, in addition to superficial aspects, such as the methods of JICA's technical cooperation, and changes in its direction. In Chapter 1, we summarized mostly the factual aspects on the history and developmental process of irrigated agriculture in Ghana, and described the structural problems of Ghana's irrigated agriculture, and the initiatives that donors, in particular JICA, have taken in response to these problems. In Chapter 2, based on the testimonies of the Japanese people involved in the cooperation, we mostly described the historical aspects of how JICA's technical cooperation in Ghana began, how it changed in each of the phases, and what it has achieved. During this description, there emerged consistent common characteristics of JICA's technical cooperation, even though there had been changes in each of the phases. In Chapter 3, we analyzed the results from the study of the counterparts, who were the recipients of the technical cooperation (how they felt, and what kind of relationship they had with the Japanese experts); as well as from the study of the impact on the farmers in the model districts, and the developments of the other donors.

In this chapter, on the basis of the previous results, we will conduct modeling of JICA's technical cooperation in this case study from a CD viewpoint. Then, based on this model, we will extend the analysis of the effectiveness and problems of Japan's technical cooperation.

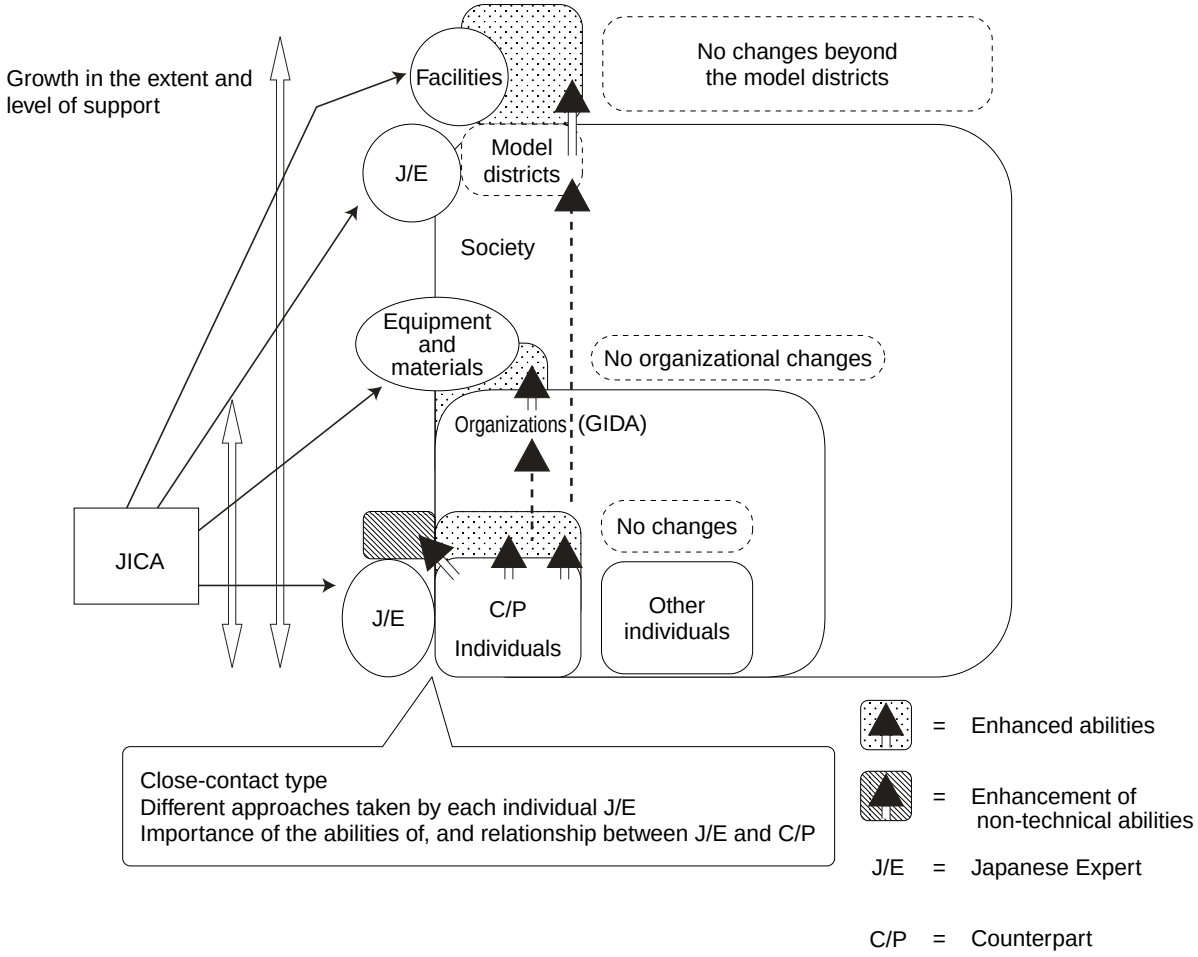
(1) Modeling of Japan's technical cooperation (from a CD perspective)

In this section, we will summarize the results of Chapters 2 and 3 from the perspective of CD. There are 3 target levels for CD: "Individual," "Organizational" and "Societal." We believe that supporting the spontaneous transformation of each is important. Figure 4-1 shows a model of JICA's efforts in Ghana for each of the 3 levels.

As can be seen here, if we view the model at the individual, organizational and social levels, cooperation focused on the individual level from 1988 when the Individual Expert Phase started, until the research project phase, and there was also some cooperation for the organizational level with the establishment of IDC. Starting from the technical cooperation project, this broadened to the societal level mostly due to the expansion of activity to the model districts. It was not the result of any policy or institutional initiative. The level of support did expand in this manner, but support was provided basically at the individual level.

Let us now summarize the characteristics of the individual level. From the analysis contained in Chapter 2 and from the results of this study, it can be said that one of the characteristics was that the Japanese experts and their Ghanaian counterparts shared a very close relationship and participated in close-contact types of technical cooperation projects. Amid this, the Japanese experts flexibly adopted different approaches according to their personalities and philosophies, and their occasional assessments

Figure 4-1 Modeling JICA's Technical Cooperation in Support for the Advancement of Ghana's Irrigated Agriculture



Source: Created by author

of the situation. This affected their relationship with the counterparts. Since a close-contact type of technology transfer had been adopted, there were instances where this approach worked extremely effectively due to a good relationship being maintained because of the expert having excellent communication skills or the counterparts being inclined to learn, and there were also contrary instances where good relationships were unable to be built, and this approach did not work. In this way, there have been differences depending on the individual. But judging from the results of the testimonies and interviews with past experts, we could suppose that, on the whole, there has been a significant impact in capacity enhancement at the individual level. Furthermore, in addition to just technological capabilities, counterparts were naturally able to understand and develop non-technical abilities, such as "enthusiasm toward work," "seriousness" and "planning ahead" by working with Japanese in this close-contact manner. Even from a CD perspective, this can be perceived as a problem-solving ability, and it would appear that it had a significant impact. On the other hand, because it was a close-contact type of cooperation, counterparts who benefited were limited to those who had direct contact with the Japanese experts, and there was no impact imparted on improving the skills and technology of other staff in the same organizations. The truth of the matter is that this kind of OJT and close-contact type of cooperation has a drawback because it inevitably leads to technology transfer being concentrated at one point, and it has virtually no impact on those individuals who have no potential of becoming counterparts. Furthermore, even supposing that technology is transferred in this narrowly-focused manner and competent personnel are developed, and if those personnel change jobs to other organizations, then the first organization ends up being right back where it started. (In reality, in GIDA's case, if we look at just 7 years between 1997 and 2004, 11 people left GIDA for other organizations such as the World Bank. Though there are no concrete figures, at a moderate estimate, more than half of the counterparts have left GIDA over these past 16 years.)

Under ordinary circumstances, cooperation would not stop at improvements at the individual level, but would be linked to improvements for organizations, and organizational responses would be needed to counter the outward flow of human resources. We have asserted the importance of the spontaneous transformation of organizations from a CD perspective. However, from observations made during this study, it can be argued that, during these past 16 years, JICA's support has not been used for any organizational enhancements to GIDA itself. Of course, a new organization called the IDC was created in the GIDA organization, and much equipment and materials was allocated to the new center. Even during the ensuing technical cooperation project with equipment and materials contributed, the enhancement of the organization was in no way small in terms of "tangible objects." However, this was not linked to organizational improvements for GIDA, and even to this day, GIDA continues to struggle under financial pressures and shortages of human resources. Amongst the counterparts, there were some who saw a changing attitude of GIDA's ruling body recognizing the importance of not only irrigation but also farming through JICA's various projects. But for the majority of counterparts, "there was virtually no significant impact." So we could hardly say that an invisible

thing by itself, namely attitude changes, would lead to organizational reform. As a result, a transformation in attitude and tangible objects, namely equipment and materials, was brought about, but JICA's cooperation was unable to bring about any substantial transformations to GIDA as an organization.

Furthermore, at the societal level, which is not a policy or institutional level, mainly activities were conducted at the model districts. As can be seen from the field studies, JICA's cooperation is recognized as leading to notable increases to agricultural produce and to improving the lifestyles of farmers in the model districts. Technology was not the only factor for this. The "tangible" assistance of improvements to facilities was also a key factor. The increase in agricultural produce was not entirely due to the endogenous changes of farmers, but was also partially due to injections of foreign capital. Another distinguishing characteristic is the fact that the efforts directed at the model districts were not funneled through GIDA, but were implemented as technical cooperation projects by the Japanese experts, together with the counterparts, by "direct" contact with the farmers. Since the counterparts were GIDA employees, it could be perceived that there was some indirect learning as an organization. However in reality, it can also be argued that the efforts were only linked to improving technology of the counterparts on an individual base, and that learning for GIDA as an organization was neglected. With regard to the districts beyond the model districts, training and other aspects were strengthened during the final phase (the Follow-up Phase for technical cooperation), but this did not go as far as yielding any significant changes resembling that for the model districts. Furthermore, policy and institutional changes had not been originally considered from the planning stage.

(2) The effectiveness of JICA's technical cooperation in Ghana from a CD perspective

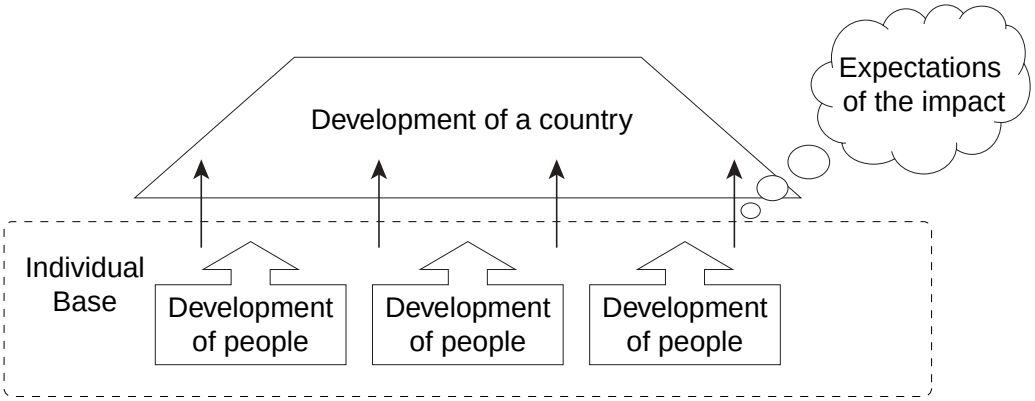
While it may be confined to the case example of JICA's technical cooperation in supporting irrigated agriculture in Ghana, viewed from the aspect of changes to the 3 CD levels, it can be said that JICA's cooperation has exerted a significant impact on the counterparts at the individual level, and this has had the effect of leading to improved not only technological skills, but also other skills, such as attitudes to work and methods of doing things. We could say that this perfectly coincides with the CD concept of aiming for the "improvement of problem-solving abilities" more than just the transfer of technology, and that JICA's close-contact type of technical cooperation is extremely effective for CD at the individual level. For the organizational and societal levels as well, similarly impressive results have been left behind in terms of tangible objects and direct contact. The fact is that the IDC was newly organized in GIDA, and at the societal level, a significant influence sufficient to change farmers' lives was left behind in the model districts, in which the technical cooperation was directly involved.

However, on the other hand, in the areas in which JICA's technical cooperation have had no involvement, no effects have been seen at any of the individual, organizational or societal levels. For example, although the IDC was established, its parent organization, GIDA, still struggles now under

financial pressures and shortages of human resources. Although some people were of the opinion that changes in attitude were produced, it is our honest opinion that, viewed from the 16 years of cooperation, there were virtually no impacts for organizational improvements. Furthermore, at the societal level, the effects generated in the model districts have not reached a point where they spread to other districts and where the structure of Ghana's irrigated agriculture changes. In addition, due to the fact that cooperation has been focused entirely on the activities within the projects, no concrete effects have been exercised on social structures or policies.

However, there would be no point in bringing down the judgment that, based on this, JICA's cooperation has had no effect at the organizational or societal levels. This is because, from the very beginning, there was no clear strategy for technical cooperation in JICA's initiatives targeted at the organizational level or societal level. Japan's conventional technical cooperation was devoid of technical cooperation from the organizational level and societal level viewpoints. JICA's slogan for technical cooperation offers us a glimpse into its underlying concept for technical cooperation. That underlying concept had long been "Developing a country means developing its people." (Since JICA's reorganization into an independent administrative institution, the concept has been, "For a better tomorrow for all in the world.") In other words, the logic is to develop a country by carefully "developing people" to support organizations and the society, that is to say, by conducting technical cooperation carefully at the individual level. On this basis, Japan's technical cooperation attached much importance on the individual, and it took a close-contact type of approach that emphasized practical business affairs. Based on this concept, during the period from the Individual Expert Phase to the technical cooperation project, Japan's cooperation took an approach that placed emphasis on the individual. In reality, the effectiveness at the individual level was more than sufficient. Furthermore, in theory, we could say that, because the counterparts, who changed jobs, ended up transferring to similar organizations, (regardless of the kinds of organizations) even this approach had some form of effect in developing the country.

Figure 4-2 The Assumption Manifest in JICA's Slogan



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On the other hand, even though we have said the cooperation was individual-based, the level of CD has shifted to a higher level through a continuing trial and error process, as described in Chapter 2, from the research projects, to the field-based technical cooperation project in the model districts, to the follow-up project that focused on nationwide expansion. Though there was no notion of CD, the fact that it changed "naturally" is a most interesting phenomenon. We can acknowledge the effectiveness of the gradualism because of 2 facts that the transformation was as a result of these kinds of adjustments in direction being implemented through "flexibility without strategy," which can be cited as a characteristic of Japan's technical cooperation, and "decisions made by the Japanese experts, who were key players," and that the changes were proceeding in the correct direction from a CD perspective.

(3) Problems with JICA's technical cooperation from a CD perspective

Let us then turn to the questions of whether this kind of proceeding progressively "from side to side," as we saw with the "omikoshi model" in Chapter 2, is a good approach, and whether there is any waste. According to the counterparts, who were the actual recipients of this individual-based technical cooperation, the cooperation of the 16 long years was not in any way wasteful. The substance of technology that was acquired in each phase from basic research to practical farming did evolve and the most common view is that this allowed the counterparts to "gradually" improve their skills. From a CD perspective, we could also say that proceeding in a gradual or progressive manner in line with the development of the counterparts and organization is an effective form of support for generating endogenous changes, although it takes more time than injecting sophisticated technology.

At the same time, there are many issues from the perspective of how the 3 levels of CD were affected. There is no question that JICA's cooperation naturally expanded its scope of activities from the individual level to the societal level, and that its direction was proper from a CD perspective. However, there was much waste if we look strategically at the fact that the approach proceeded progressively in an opportunistic manner, without embracing any concept of organizational, or social levels of CD. For example, there were strategic oversights where there was no connection from the capacity enhancement of counterparts to the enhancement of GIDA as an organization, and where costly activities were implemented in the model districts without any careful consideration of the expansion to other districts. In terms of tactics, the facts that Japanese experts, together with their counterparts, conducted direct communication with the farmers, and that the improvements to facilities were advanced with an emphasis on the success of the model districts were probably the correct option to achieve the project purpose. At the same time, there are also instances where tactically correct aspects are not correct strategically. For example, committing large amounts of inputs into the model districts makes it difficult to expand to other districts, though the model districts become successful. In fact, during these 16 years of activities, though improvements were realized at the individual level, the enhancement of the organization was not fully realized due to an outflow of personnel from GIDA, and a constant shortage of funds. Even if solutions are sought from Japan's style of technical cooperation,

which supposes only cooperation at the individual level, the original purpose is something different, and there is a limit to Japan's style of technical cooperation. The notion of "organization-building" is completely absent from JICA's aforementioned slogan of "developing a country means developing its people." More than just its slogan, there is also no specific commitment to improving organizations in JICA's actual technical cooperation. In the future, if improvements are to be sought in the 3 levels of CD, it will be necessary to analyze the necessity of technical cooperation at the organizational and societal levels from a more comprehensive perspective, and to strategically examine how best to target technical cooperation at the organizational and societal levels.

Moreover, it is not that there are no problems at the individual level, which is recognized as being effective. As far as looking at the activities in Ghana, the effects of technical cooperation at the individual level vary depending on the abilities of the experts, and their relationship with the counterparts. A significant portion of the experts' abilities in particular is made up of communication skills, and their ability to build relationships with the counterparts, in addition to merely their technical abilities and experience in the industry. Supposing we tentatively call this the experts' "abilities for technical cooperation processes," it appears that the importance of these abilities is not fully appreciated. "Abilities for technical cooperation processes," including communication and other skills, are skills that are vital in advancing technical cooperation at the individual level. The abilities are not meant to assist the technical capabilities that experts should have. With technical capabilities likened to the right wheel of a vehicle, the abilities for technical cooperation processes are the left wheel, and it is only when we have both wheels that technical cooperation can move forward. It is necessary to stabilize and strengthen the strength of Japan's technical cooperation - technical cooperation at the individual level - by fully appreciating the importance of the abilities for technical cooperation processes, clearly defining what they are, and putting the abilities into action in everyday operations.

Table 4-1 summarizes the effectiveness and problems mentioned so far. Based on the results

Table 4-1 Summary of the Effectiveness and Problems in Japan's Technical Cooperation

Effectiveness	Problems
• Able to flexibly adjust the content of the projects according to circumstantial changes. • Able to make optimum choices at the project level. • Does not waste past inputs. • Raises the ownership of the experts. • Able to build non-business-like personal relationships with the counterparts. • Effective at the individual level, namely the development of counterpart personnel. • Has impact on involvements at the organizational and societal levels.	• There is no strategy, and unable to understand the course to the final goal. • Attention is focused only on outcomes at the project level, and the overall positioning is unclear. • On the whole, inputs are excessive, and are being wasted. • Success and failure is divided according to the quality of the experts, or the quality and attitudes of the counterparts. • There is little impact on individuals who are in the same organization but are not involved with the experts. • Unable to have a significant impact that provides fundamental improvements at the organizational and societal levels.

Source: Created by author

shown in Table 4-1, in the next section, we will outline suggestions for overcoming these problems while enhancing the effectiveness of JICA's technical cooperation.

4-2 Proposals for Improvement

If we look at the effectiveness and problems of Japan's technical cooperation as raised in Chapter 3, the following improvements are likely to be sought for Japan's future technical cooperation. In this section, we will outline suggestions for the following 5 proposals for improvements.

① The need for strategic and comprehensive measures
② The benefits and strengths of Japan's flexibility and progressive approach
③ Strengthening the capacity of JICA's headquarters and overseas offices to formulate strategies
④ Strengthening the capacity of the technical cooperation process for Japanese experts
⑤ Differentiating Japan from other countries (the strengths of the conservatives for technical cooperation)

(1) The need for strategic and comprehensive measures

The most important proposal in this study is "the need for strategic and comprehensive measures." As mentioned in Chapter 2, technical cooperation directed at Ghana's irrigated agriculture has shared an overall goal of the "advancement of irrigated agriculture," however, there have been "gaps" in the approaches for cooperation, such as the strategies adopted being different according to the phase. Possibly for this reason, the failure to achieve the overall goal has remained a problem, even to this day, despite the cooperation spanning a long period.

The trigger for the emergence of these "gaps" most likely lies in the cooperation technique itself that JICA has historically adopted, namely to "analyze problems and examine matters on a project basis." If the capacity required to achieve the overall goal had been analyzed comprehensively and strategically, JICA could have possibly been able to take a more efficient and effective approach for cooperation. Table 4-2 shows the capacity for each level required to achieve the overall goal, namely the "advancement of irrigated agriculture," as well as the scope of JICA's initiatives, as seen in this case study. As shown in Table 4-2, capacity spanning the individual, organizational, and institutional and societal levels is needed for the "advancement of irrigated agriculture." However, the targeted scope of technical cooperation from 1988 to 2004 did not exceed CD at the individual and organizational levels. Furthermore, the focus of activities was confined to counterparts, the IDC and the model districts. It can be argued that underlying the cooperation being confined to this scope was a tacit roadmap which was subject first to JICA's technical cooperation and second to the self-help efforts of the Government of Ghana, with the former being ① the technological development of IDC, ② the development of human resources through training, and ③ the construction of model districts for the advancement of

Table 4-2 The Capacity Required for the "Advancement of Irrigated Agriculture" and the Scope of JICA's Initiatives

Level		Capacity Required for the Advancement of Irrigated Agriculture	Scope of Cooperation Efforts
Individual Level	Farmers	• Farming techniques • Techniques for the operation and maintenance of irrigation facilities	• Technical guidance for farmers from model districts • Technical training for farmers from across the country (only during SSIAPP Follow-up)
	GIDA Technical Personnel	• Being able to guide farmers • Farming techniques • Techniques for the operation and maintenance of irrigation facilities • Techniques for repairing and improving irrigation facilities • Knowledge on the establishment of irrigation associations, and methods of cultivation	• Technical guidance for counterparts • Technical training for project managers and extension officers from irrigation districts across the country (from the latter half of the SSIAPP)
Organizational Level	Farmers' Organizations	• Formation and activities of irrigation associations • System for collecting irrigation service charges, and its operation • System for the operation and maintenance of facilities	• Development and enhancement of irrigation associations in model districts
	GIDA	• Technical guidance framework for farmers (personnel, budgets, systems) • System for the operation and maintenance of irrigation facilities (as above) • Securement and implementation of budgets for repairing and improving irrigation facilities • Regulations related to the advancement of irrigated agriculture	• Establishment and enhancement of Irrigation Development Center (IDC)
Institutional and Societal Level		• Policies for the advancement of irrigated agriculture, and securement of budget to implement such policies • Institutions related to the advancement of irrigated agriculture ("System for Participatory Irrigation Management," etc.) • Appropriate distribution and markets (securement of profitability of irrigated agricultural produce)	• Support for building irrigation management system (in 2004 and beyond)

Source: Created by author

irrigated agriculture; and the latter being ① the development of the necessary policies and institutions, and their subsequent implementation, ② the nationwide dissemination of technology based on the outcomes of the cooperation, and ③ the achievement of the advancement of irrigated agriculture (the overall goal). However, things did not develop as in the roadmap, and the reality is that Ghana's efforts for the advancement of irrigated agriculture have not yet started at the national level.

Why did things end up this way? It is likely that the contributing factors were ① an approach to cooperation that could not adapt to the changes of the recipient, and ② an approach to cooperation that lacked a grand design.

1) An approach to cooperation that could not adapt to the changes of the recipient

If we compare the start of JICA's technical cooperation in the 1980s with the present, as shown in Table 4-3, the circumstances surrounding Ghana's irrigated agriculture have undergone significant changes under the influence of structural adjustments (with an aim to cut government appropriations, shift to smaller governments, etc.) and globalization (the liberalization of trade, etc.). In this way, the circumstances surrounding Ghana's irrigated agriculture have gone from bad to worse, and the CD as delineated in the implicit roadmap for JICA's technical cooperation for the purpose of achieving the overall goal with the self-help efforts of the Government of Ghana could not be realized ultimately. We think that the factors contributing to these kinds of results were behind the preoccupation with project-based cooperation without any inclusive analyses being conducted in response to these changes, despite local circumstances changing dramatically as just described.

2) Cooperation that lacked a grand design

If inclusive analyses had been conducted and strategies formulated in response to these circumstantial changes, the entry point for cooperation, in particular the cooperation approach from the Mini Project Phase of the 1990s when the conditions began to change significantly, would probably have been entirely different. Judging from the weakening of the government, we believe there was a major shift in direction toward the "advancement of irrigated agriculture" where the farmers and farmers' organizations became the main players. If there had been a grand design that was responsive to these kinds of changing times, then support cooperation for nationwide farming training, which was implemented during the SSIAPP Follow-up Cooperation, and support cooperation for the system-building, currently being implemented, would probably have started in the Mini Project Phase, and there probably would now have been a greater impact on Ghana's

Table 4-3 Changes in the Circumstances surrounding Ghana's Irrigated Agriculture

Item	1980s	Present
GIDA staff numbers	Approx. 1,500	Approx. 300
GIDA budget	Adequate budget levels	Approx. 80 % is personnel expenses; project expenses are extremely limited
Management of irrigation facilities	Government-led management	Management led by farmers' organizations
Farming conditions	Farming subject to government subsidies	Profitability of rice as the typical irrigation crop has plummeted due to influx of imported rice
Conditions of irrigation facilities	All irrigation districts nationwide functioning	Of the 22 irrigation districts nationwide, 6 irrigation districts have ceased operations due to the aging of facilities, or their inability to sustain the operating expenses
Ghanaian finances	Highly successful structural adjustment, high economic growth	Heavily Indebted Poor Country

Source: Created by author

irrigated agriculture. In hindsight, it seems that the absence of a grand design was a contributing factor in the production of cooperation that was far from effective. Based on the above analysis, it can be argued that "strategic and comprehensive measures" are essential for improving future technical cooperation. Figure 4-3 shows the cycle of implementing cooperation based on these measures. If activities can be implemented through this kind of cycle, subject to the formulated roadmap, then more efficient and effective cooperation designed for achieving the overall goal should be possible. The following is an outline of the components of the implementation cycle shown in Figure 4-3.

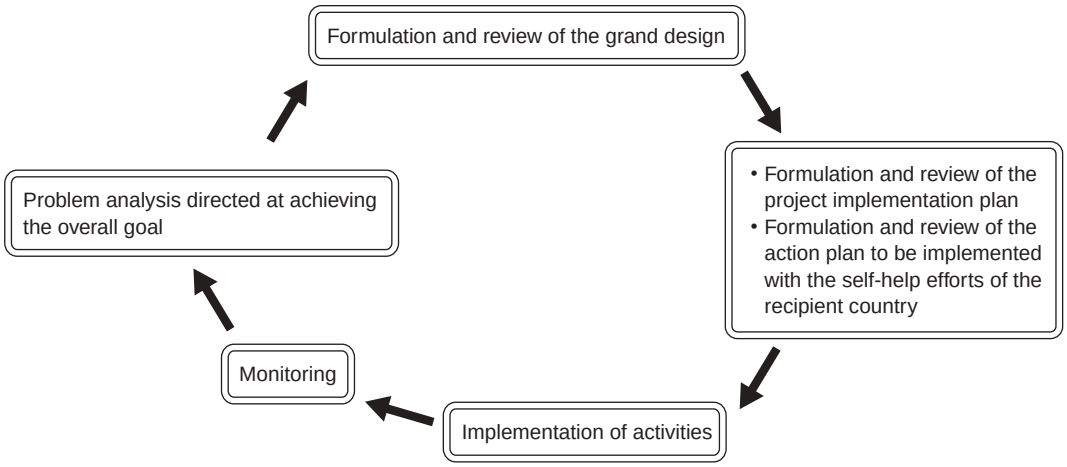
Analysis of the problems in achieving the overall goal

This problem analysis is conducted, based on the perspective of whether the necessary capacity exists to achieve the overall goal.

Formulation of a grand design and action plans

In response to the results of the problem analysis, a grand design (medium- and long-term roadmap) for achieving the overall goal is formulated. As shown in Table 4-2, the capacity needed to achieve the overall goal covers a broad range of topics. Therefore, the self-help efforts of the country in question are essential in achieving the goal. Consequently, in formulating the grand design, it is necessary to separate those issues to be resolved by the self-help efforts of the country in question, and those to be resolved by the support of the cooperating organization. The grand design is formulated with the participation of the project stakeholders, and then the entry point of the cooperation is determined, and the positions of the relevant matters on the roadmap are identified. This sharing of the roadmap for the overall goal by stakeholders, through this type of

Figure 4-3 The Cycle of Providing Cooperation through Strategic and Comprehensive Initiatives



Source: Created by author

collaborative activity, is the first step for strategic measures. Following the formulation of the grand design, more detailed action plans are formulated with chronological aspects also taken into account.

In order to undertake problem analysis and formulate the grand design, as mentioned above, it would be necessary to improve the application form for cooperation and to enhance the preliminary evaluation survey.

Implementation of activities, and monitoring

Monitoring will be conducted at certain points during the implementation of activities. In addition to comprehending the progress status of the project, analysis will be conducted to determine whether there have been any changes to the preconditions that were set at the time the grand design was formulated. If changes are observed, the roadmap will be re-examined, and the project action plans will also be reassessed. This type of monitoring that includes the grand design is necessary for raising the effectiveness of the cooperation.

The formulation and implementation of plans by means of these strategic and comprehensive efforts, and the addition of a system that can reexamine the position and direction of projects are crucial in improving technical cooperation.

(2) The benefits and strengths of Japan's flexibility and progressive approach

It is necessary to occasionally monitor the relevance and effectiveness of the comprehensive strategy for achieving the overall goal, which was dubbed the "roadmap" in the first recommendation, and to revamp it according to environmental changes. The person who bears this important role is the local Japanese expert. In this study, it was revealed that the Japanese expert has progressively advanced technical cooperation by assessing the local conditions, and flexibly changing the approach. This is because there was no genuine strategy in Japan's original technical cooperation. We could say that the performance of the Japanese experts was staged in an unrestricted policy environment. However, if a strategic approach is adopted in the future, there is a fear that the environment in which this kind of flexibility can be exercised will become stifled, and the precious strength of the Japanese in the field will be dampened. For the serious-minded Japanese, there seems to be concern that, once some kind of plan is mapped out, they will have to stick to it, however, the plan should be flexibly adjusted in view of the conditions in the field. We have suggested above that a strategy be formulated. But this is a roadmap, and it must not be something to which the activities of the Japanese experts in the field be tied. Even if a strategy has been developed, it is something that shows the shortest route to the overall goal. So, when the route is wrong, it is preferable that the route be changed without hesitation, and progressively moved forward with the use of the past assets. Consequently, even if a strategy has been developed, it would need to be emphasized that the strategy should not be positioned as a supreme plan,

but should take the form of a "roadmap" so it can be changed and moved forward step by step. Furthermore, at this stage it is important to incorporate a means by which the views from the field can be heard. To be more precise, at the mid-term evaluation and the terminal evaluation, it is important to proceed with a reassessment of the strategy itself - not just the project - with the views from the field respected as much as possible.

(3) Strengthening the capacity of JICA's headquarters and overseas offices to formulate strategies

Although the role of the Japanese expert who is responsible for the field is important, just as important are the roles of the umbrella organization, namely JICA's headquarters, and the overseas offices; and further strengthening of these roles is required. In order to extend the effects to specifically the institutional and societal levels, we would like to stress that it is the responsibility of JICA's headquarters and overseas offices to devise a strategic roadmap and to manage it with consistency. There are limits to the actions of the experts at the individual level in effecting long-term and fundamental improvements at the organizational and societal levels. Notwithstanding the fact that individual technical cooperation projects expire after a fixed period of time, organizations and society have no such end. Each project should be considered as a single section in the broader strategy, and subsequent follow-up should be employed with an emphasis on sustainability. This is not to say that support is provided to projects habitually, but it is necessary to promote technical cooperation strategically, with a long-term perspective and a strategic thinking. For this purpose, what is needed is the ability to conduct analysis on each of the individual, organizational and societal levels, and the advanced abilities to carve this out into the form of a strategy, and then to convert these strategies into the concrete shape of projects. Unless JICA acquires these advanced capabilities strategically in its capacity as an organization, it will be difficult to put them into practice. At present, research on approaches is being implemented for each sector, but this needs to go even further without stopping at the mere systemization of knowledge, and there needs to be a means for getting feedback from the fields yet again and putting this into practice.

(4) Strengthening the capacity of the technical cooperation process for Japanese experts

As for technical cooperation at the individual level, we have ascertained that Japan's close-contact style of cooperation generates improvements to both the technical and non-technical abilities of the counterparts. However, this is dependent on the Japanese experts having good communication skills, and being able to build good relationships with the counterparts. Conversely, when they do not have these skills, the effectiveness of the improvements will be poor, even if they have technical capabilities. In this section, we have tentatively called these non-technical capabilities, "abilities for technical cooperation processes." These may include the following:

- Project management skills
- Cooperative/collaborative attitude

- Personal communication skills
- Ability to advise and motivate
- Language abilities
- Ability to understand different cultures

To the experts, these types of abilities are treated as nothing more than secondary abilities for process management, but essentially they can be perceived as very much skills for experts that hold an importance equivalent to that of technical capabilities. In order to increase the effect of experts, not as technicians but as true experts, it will be necessary to clearly define the importance of the abilities for technical cooperation processes, and to examine them in the future, as standards for selecting suitable experts, and for the content of training programs. Moreover, in project planning and progress management as well, it is important to incorporate elements for examining processes into PDM, and Plan of Operations (P/O), and to monitor the processes. To be more precise, at the P/O level, specify who will implement the individual activities (the expert or the counterpart), and what kind of skills are expected to be acquired as a result. Even at the PDM level, actual performance will be able to be monitored after indicating what percentage of activities is to be the concern of the experts or the counterparts, and setting the level of participation for the counterparts during the planning stage.

(5) Differentiating Japan from other countries (the strengths of the conservatives for technical cooperation)

If it is only Japan that tries to extend the scope of support beyond the individual level to the organizational and societal levels, the burden will be great, and if it is an area in which Japan does not have much experience, all that much more preparation will be necessary. On the other hand, even while harboring concerns, other European and U.S. donors have taken the bold course of direct support for organizations, such as budgetary aid. They are taking the initiative in intervention at the organizational and societal levels. Japan's strategy will be also fully effective - the strategy of carefully watching the trends of those donors embarking on these initiatives for the organizational level, and then specializing in areas in which other donors do not venture to enter, namely practical technical cooperation at the individual level, in which Japan most excels. Reading through all the interviews with donors to Ghana, we found that Japan's technical cooperation is not outdated, but it remains as one important modality for supporting Ghana's development. What is really important is where and how the cooperation is used. As many donors shift the focus of their assistance to the policy level of general budget support and policy support (governance) in countries especially like Ghana, support is getting weaker and weaker in the area of practical technical cooperation, such as the development of social infrastructure and engineering which directly benefit the people. With this situation taken into account from a strategic standpoint, if Japan were to shift toward budget support without any clear strategy, it would be nothing more than a pale imitation of others, and it would not be strategically effective in general terms. Another way of thinking is that needs will actually be generated in the areas for which assistance is

weakening. It is here that Japan can work to differentiate its assistance in a positive way. As long as Japan can conform to the standard strategic practices of "selection" and "concentration," it is conceivable that Japan can differentiate itself positively from other countries by taking a position of "conservatives for technical cooperation," and further enhance its advantage of careful practical technical cooperation through contact with people. Japan's technical cooperation is actually focused on practice in the field. Compared with other donors, the content of its cooperation is more technical-oriented. On the other hand, European and U.S. donors are taking the initiative in such aspects as institution-building. We think that this fact suggests a possibility of collaboration. In other words, even supposing we analyzed the possibilities for support across the 3 levels, they could not all be covered by Japan alone. However, the selection of, and concentration in individual-based technical cooperation could really exert significant effects only through a comprehensive strategy that is derived from an assessment of the situation for assistance at the organizational and societal levels. It would be important to take a stance of taking a holistic perspective and to focus on the area in which one's strengths can be most exercised. In order to identify where Japan's strengths should be exercised, overseas offices must collect information, and promote collaboration with other donors strategically.

4-3 Issues for Future Research

As we have already mentioned in Chapter 2, when attempting to discuss things that cannot be measured quantitatively or actualized, such as personal relationships or feelings as described in this study, the source of information comes down to the testimonies of the persons involved, and they cannot be verified scientifically. The truth was that, when we had established a particular image from interviewing certain persons involved, we would sometimes get an entirely different image from interviewing other persons involved. At the beginning, while going through this process, and collecting information repeatedly without knowing any idea, we were concerned whether we would really get to the truth. However, after repeating the interview again and again, and looking at the differences comprehensively, we finally came to see a certain level of directionality. Although it cannot be demonstrated scientifically, things are subjective, so we should be able to see the truth only after collecting these subjective views and looking at things from multiple aspects. Furthermore, what we began to understand by focusing on interviews was just how important person to person relationships are. When relationship-building has failed, there is a tendency that not only are there negative evaluations of the persons, but the activities that each person is conducting and even the organization to which each person belongs are also viewed negatively. Though technical cooperation is something which is strived for through the direct interaction between people, the issue of "how to address relationships in technical cooperation" has not been adequately delved into as a research issue. Furthermore, concerning the experts' abilities for technical cooperation processes to build relationships successfully, there are questions as to what kinds of skills are actually needed, whether they can be defined, or they are something that can be tested or measured quantitatively, or something that can be

learnt through training, or something that can only be left to chance once the experts have been sent. In this study, we defined the skills based on the opinions of the counterparts working in a certain organization in Ghana, but it is likely that more analysis will be needed in this area in the future.

Finally, as our suggestions, we mentioned the analysis of, and the response to the institutional and societal levels, but we have made no mention in this study as to how they should actually proceed, or of the framework for the approach and policies. Given that the UNDP and other organizations have already published guidelines on Capacity Assessment, these guidelines should be used to advance support for the organizational level, even on a trial basis, and further research on the subsequent effects and other aspects should be carried out.

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